MODEL G0632
16" X 42" VARIABLE SPEED WOOD LATHE
OWNER'S MANUAL

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(FOR MACHINES MANUFACTURED SINCE 11/06) #TS8724 PRINTED IN CHINA

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Foreword

We are proud to offer the Model G0632 16" x 42" Variable Speed Wood Lathe. This machine is part of a growing Grizzly family of fine woodworking machinery. When used according to the guidelines set forth in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The specifications, drawings, and photographs illustrated in this manual represent the Model G0632 when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

For your convenience, we always keep current Grizzly manuals available on our website at **www.grizzly.com**. Any updates to your machine will be reflected in these manuals as soon as they are complete. Visit our site often to check for the latest updates to this manual!

Contact Info

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

We stand behind our machines. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
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E-Mail: techsupport@grizzly.com
Web Site: http://www.grizzly.com

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

MODEL G0632
16" X 42" VARIABLE SPEED WOOD LATHE

Product Dimensions:

Weight	386 lbs.
Length/Width/Height	77 1/16 x 22 1/16 x 47 in.
Foot Print (Length/Width)	59 7/8 x 17 3/8 in.

Shipping Dimensions:

Type	Wood
Content	Machine
Weight	441 lbs.
Length/Width/Height	61 x 18 1/8 x 20 1/2 in.

Electrical:

Switch	Sealed Rocker Switch
Switch Voltage	220V
Cord Length	6 ft.
Cord Gauge	16 gauge
Recommended Breaker Size	15A
Plug	NEMA 6-15

Motor:

Power Requirement	220V Single-Phase
Type	TEFC
Horsepower	1 1/2 HP
Voltage	220V
Phase	3-Phase With 220V Single-Phase Power Inverter
Amps	4.7A
Speed	1725 RPM
Cycle	60 Hz
Number Of Speeds	1
Power Transfer	Ribbed Belt
Bearings	Shielded and Lubricated

Main Specifications:

Operation Information

Swing Over Bed	16 in.
Swing Over Tool Rest	12 in.
Distance Between Centers	42 in.
Number Of Spindle Speeds	Variable
Range Of Spindle Speeds - Low	100–1200 RPM
Range Of Spindle Speeds - High	250–3200 RPM
Floor To Center Height	44 1/2 in.
Headstock Rotation	45°, 90°, 135, 180°, 270°, 360°

Spindle Information

Spindle Type ..... Right Hand
Spindle Taper ..... MT#2
Spindle Size ..... 1¼ x 8 TPI
Spindle Bore ..... 0.445 in.
Spindle Center ..... Spur

Tailstock Information

Tailstock Taper ..... MT#2
Tailstock Center ..... Live

Construction Information

Bed ..... Precision Ground Cast Iron
Stand ..... Cast Iron
Base ..... Cast Iron
Headstock ..... Cast Iron
Tailstock ..... Cast Iron
Paint ..... Powder Coat

Other Specifications:

Country Of Origin ..... China
Warranty ..... 1 Year
Serial Number Location ..... Machine ID Label
Assembly Time ..... 30 minutes

Features:

Electronic variable speed control with digital spindle speed indicator.
Extreme spindle torque in low speed range of 100–1200 RPM with a high speed range of 250–3200 RPM.
Headstock can be rotated 360° and positioned anywhere along the bed.
Three phase motor with belt drive.

Accessories Included:

Spur center
Cup live center
Knock-out tool
Indexing pin
Tool rest
6 inch face plate
Hex wrenches

Identification

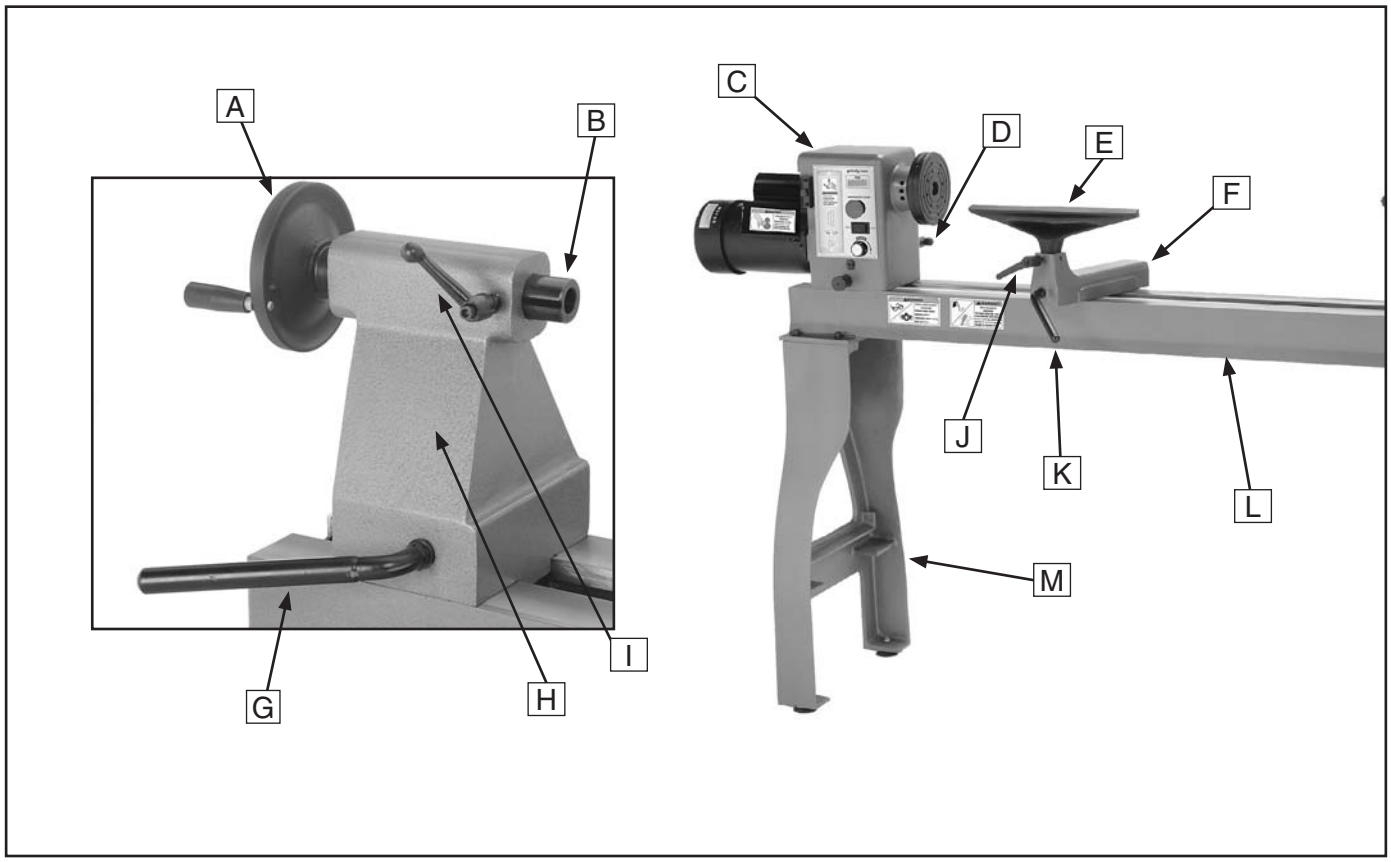


Figure 1. Model G0632 tailstock and front view.

A. Tailstock Handwheel
B. Tailstock Quill
C. Headstock
D. Headstock Lock Handle
E. Tool Rest
F. Tool Rest Base
G. Tailstock Lock Handle
H. Tailstock
I. Tailstock Quill Lock Handle
J. Tool Rest Lock Handle
K. Tool Rest Base Lock Handle
L. Lathe Bed
M. Supporting Leg

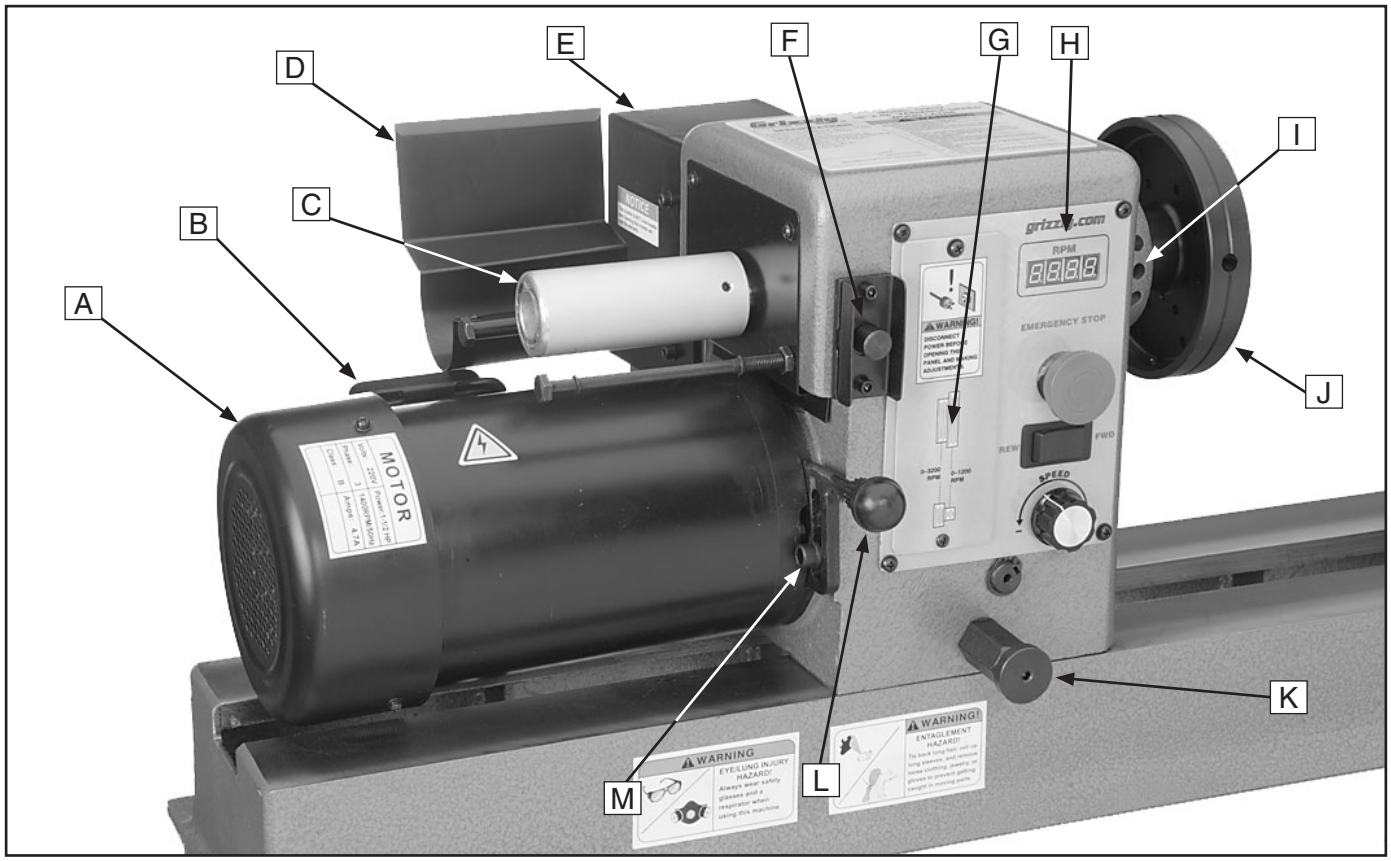


Figure 2. Model G0632 headstock.

A. Motor
B. Motor Wiring Junction Box
C. Spindle Handwheel
D. Spindle Handwheel Safety Cover
E. Frequency Inverter
F. Spindle Lock
G. Front Belt Access Panel
H. Control Panel
I. Indexing Pin Holes
J. Face Plate
K. Headstock Rotation Lock
L. Motor Tensioning Handle
M. Motor Mount Cap Screw

Figure 3. Model G0632 control panel.

A. Front Belt Access Panel—Remove this panel to access the drive belt and pulleys for changing speed ranges.

B. RPM Readout—Shows spindle RPM.

C. Emergency Stop Button—Disconnects power to the motor when pushed in. Rotate clockwise to let it pop out and reconnect power to the motor.

D. REV/FWD Switch—Used to reverse the spindle direction.

E. Variable Speed Dial—Varies the spindle speed from 100/250 RPM's to the upper limit for the selected RPM range.

NOTICE

The frequency inverter controls on the rear of the headstock have no effect on the operation of the lathe. Opening the frequency inverter will void the lathe warranty and could seriously damage the lathe. DO NOT open the case of the frequency inverter.

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING
Safety Instructions for Machinery

1. **READ ENTIRE MANUAL BEFORE STARTING.** Operating machine before reading the manual greatly increases the risk of injury.
2. **ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
3. **ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
4. **ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
5. **WEAR PROPER APPAREL.** DO NOT wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
6. **NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.

⚠WARNING
Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.

8. **KEEP CHILDREN/VISITORS AWAY.** Keep all children and visitors away from machinery. When machine is not in use, disconnect it from power, lock it out, or disable the switch to make it difficult for unauthorized people to start the machine.

9. **UNATTENDED OPERATION.** Leaving machine unattended while its running greatly increases the risk of an accident or property damage. Turn machine ***OFF*** and allow all moving parts to come to a complete stop before walking away.

10. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.

11. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.

12. **USE A GROUNDED POWER SUPPLY RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Operating machine on an incorrect size of circuit increases risk of fire.

13. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY**. Make sure switch is in OFF position before reconnecting.

14. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

15. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**

16. **REMOVE CHUCK KEYS OR ADJUSTING TOOLS.** Make a habit of never leaving chuck keys or other adjustment tools in/on the machine—especially near spindles!

17. **DAMAGED MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, other conditions that may impair machine operation. Always repair or replace damaged parts before operation.

18. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.

19. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.

20. **DO NOT OVERREACH.** Maintain stability and balance at all times when operating machine.

21. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."

22. **STABLE MACHINE.** Machines that move during operations greatly increase the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.

23. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.

24. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.

⚠WARNING
Additional Safety for Wood Lathes

1. **KEEPING GUARDS IN PLACE.** Make sure all guards are in place and the lathe sits on a flat, stable surface.

2. **EYE/FACE PROTECTION.** Always wear eye protection or a face shield when operating the lathe.

3. **RESPIRATORY PROTECTION.** Always wear a respirator when using this machine. Wood dust may cause allergies or long-term respiratory health problems.

4. **MOUNTING WORKPIECE.** Before starting, be certain the workpiece has been properly embedded on the headstock and tailstock centers and that there is adequate clearance for the full rotation of the workpiece.

5. **ADJUSTING TOOL REST.** Adjust tool rest to provide proper support for the turning tool you will be using. Test tool rest clearance by rotating workpiece by hand before turning lathe ***ON***.

6. **TURNING SPEED.** Select the correct turning speed for your work, and allow the lathe to gain full speed before starting the operation.

7. **USING SHARP CHISELS.** Keep lathe chisels properly sharpened and held firmly in position when turning.

8. **OPERATING DAMAGED LATHE.** Never operate the lathe with damaged or worn parts.

9. **WORKPIECE CONDITION.** Always inspect the condition of your workpiece. DO NOT turn pieces with knots, splits, and other potentially dangerous conditions. Make sure joints of glued-up pieces have high quality bonds and will not fly apart during operation.

10. **ADJUSTMENTS/MAINTENANCE.** Make sure your wood lathe is turned ***OFF***, disconnected from the power source, and all moving parts have come to a complete stop before starting any inspection, adjustment, or maintenance procedure.

11. **STOPPING LATHE.** DO NOT attempt to stop the lathe by using your hand against the workpiece or face plate. Allow the lathe to stop on its own.

12. **AVOIDING ENTANGLEMENT.** Keep long hair and loose clothing articles such as sleeves, belts, and jewelry items away from the lathe during operation.

13. **FACEPLATE TURNING.** When faceplate turning, use lathe chisels on the downward spinning side of the workpiece only.

⚠WARNING

Like all machinery there is potential danger when operating this lathe. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this lathe with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

SECTION 2: CIRCUIT REQUIREMENTS

220V Single-Phase

⚠WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the setup process. DO NOT connect the machine to the power source until instructed to do so.

Amperage Draw

The Model G0632 motor draws the following amps under maximum load:

Motor Draw at 220V..... 4.7 Amps

Circuit Requirements

The included frequency inverter takes in 220V single-phase power and converts it to 3-phase power for the variable speed lathe motor. We recommend connecting your machine to a dedicated and grounded circuit that is rated for the amperage and phase given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

220V, Single Phase Circuit ..... 15 Amps

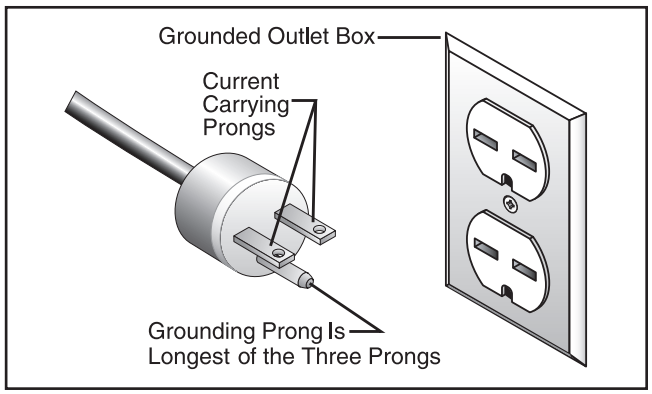


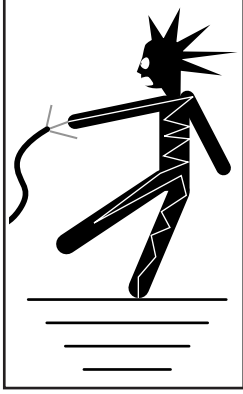
Figure 4. NEMA 6-15 plug and receptacle.

Plug/Receptacle Type

Recommended Plug/Receptacle.....NEMA 6-15

Grounding

In the event of an electrical short, grounding reduces the risk of electric shock. The grounding wire in the power cord must be properly connected to the grounding prong on the plug; likewise, the outlet must be properly installed and grounded. All electrical connections must be made in accordance with local codes and ordinances.



⚠WARNING

Electrocution or fire could result if this machine is not grounded correctly or if your electrical configuration does not comply with local and state codes. Ensure compliance by checking with a qualified electrician!

Extension Cords

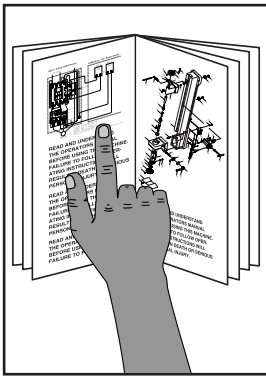
We do not recommend the use of extension cords. Instead, arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.

If you find it absolutely necessary to use an extension cord at 220V with your machine:

- Use at least a 16 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician MUST size cords over 50 feet long to prevent motor damage.

SECTION 3: SETUP

Setup Safety



⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!

⚠WARNING

Wear safety glasses during the entire setup process!

⚠WARNING

The G0632 and its components are very heavy. Get lifting help or use power lifting equipment such as a fork lift to move heavy items.

Items Needed for Setup

The following items are needed to complete the setup process, but are not included with your machine:

Description	Qty
• Assistance	As Needed
• Safety Glasses (for each person)	1
• Level	1
• Measuring Tape	1
• Wrench 17mm	1
• Cleaning Solvent	As Needed
• Shop Rags	As Needed

Unpacking

Read and understand the rest of the instructions contained in this **SETUP** section before moving and assembling the lathe.

The Model G0632 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.

Inventory

After all the parts have been removed from the shipping containers, you should have the following items:

Inventory: (Figures 5–7)	Qty
A. Lathe Assembly	
—Headstock (mounted)	1
—Tool Rest Base (mounted)	1
—Tailstock (mounted)	1
—Face Plate 6" (installed)	1
B. Supporting Legs	2
C. Machine Feet	4
D. Tool Rest	1
E. Spur Center MT#2	1
F. Live Center MT#2	1
G. Hex Wrenches 3, 4, 8mm	1 Ea
H. Knockout Tool	1
I. Indexing Pin	1
J. Hardware (not shown)	
—Cap Screws M10-1.5 x 25	8
—Lock Washers 10mm	8

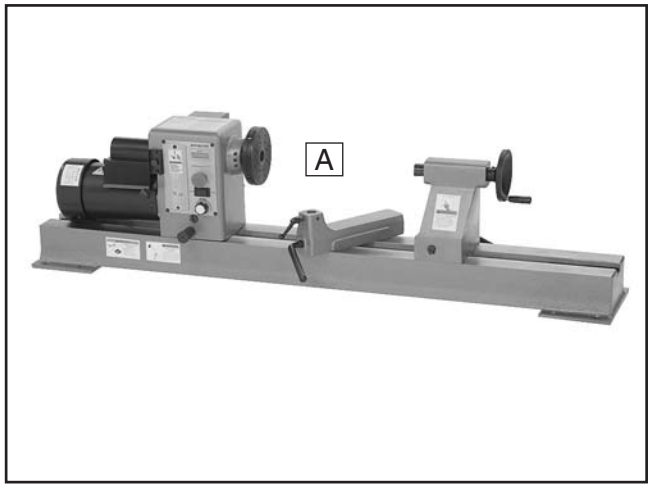


Figure 5. Model G0632 inventory A.

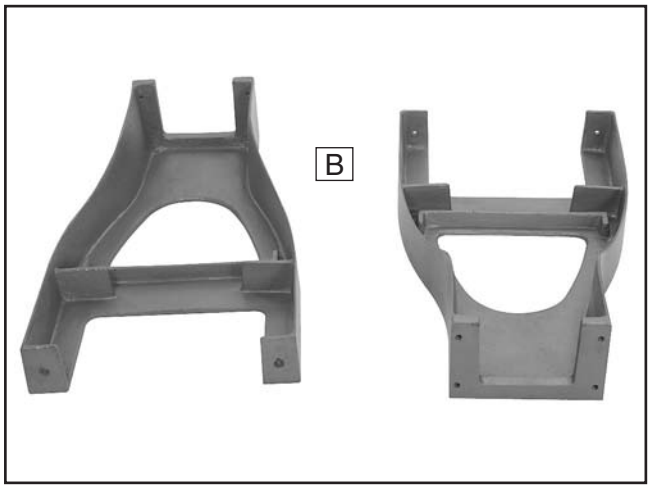


Figure 6. Model G0632 inventory B.

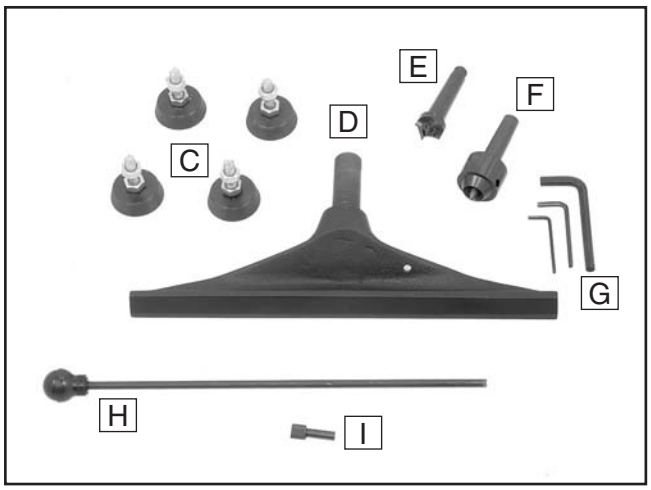


Figure 7. Model G0632 inventory C–I.

If any nonproprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed. Check mounting locations before assuming that any items from the inventory list are missing.

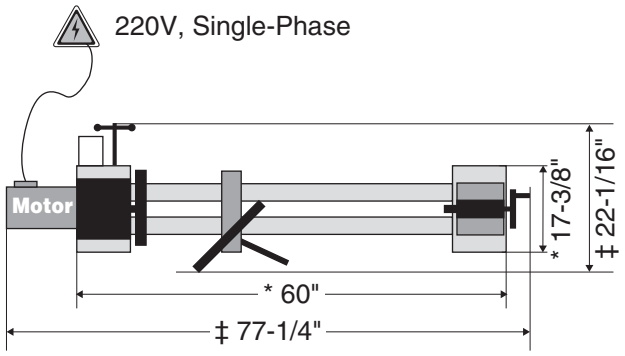
Site Considerations

Floor Load

Refer to the **Machine Data Sheet** on **Page 3** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

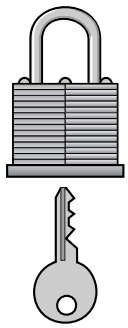
Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables, other machinery, and the operator when establishing a location for your new machine. See **Figure 8** for the minimum clearance dimensions.



* Footprint
‡ Minimum Working Clearance

Figure 8. G0632 clearance dimensions.



⚠CAUTION

Children and visitors may be seriously injured if unsupervised. Lock all entrances to the shop when you are away. DO NOT allow unsupervised children or visitors in your shop at any time!

NOTICE

We strongly recommend securing your machine to the floor if it is hardwired to the power source. Consult with your electrician to ensure compliance with local codes.

Mounting to Shop Floor

Generally, you can either bolt your machine to the floor or mount it on the included machine feet. Although not required, we recommend that you bolt your new lathe to the floor. Because this is an optional step and floor materials may vary, only machine feet are included with your lathe. Whichever option you choose, it is necessary to level your machine with a precision level.

Bolting to Concrete Floors

Lag shield anchors with lag bolts and anchor studs (**Figure 9**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.

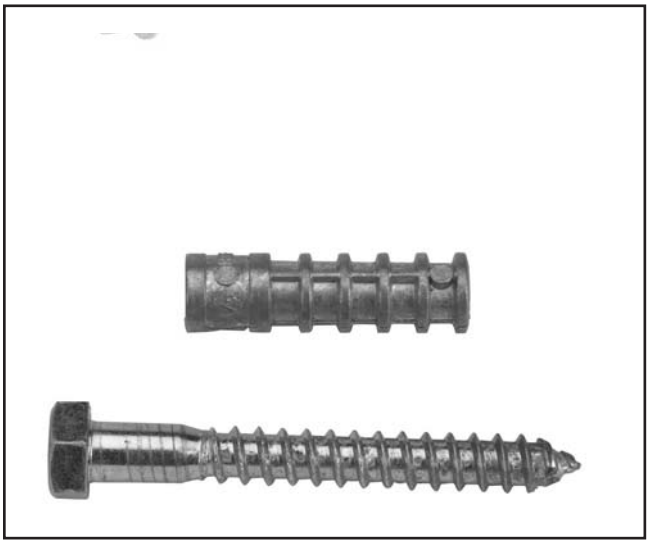


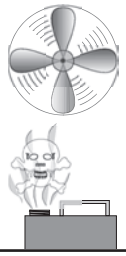
Figure 9. Typical mounting fasteners for concrete floors.

Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Citrus Degreaser. To clean thoroughly, some parts must be removed. **For optimum performance from your machine, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.

⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



⚠CAUTION

Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

G7895—Grizzly Citrus Degreaser
This natural, citrus-based degreaser is a great solution for removing export grease, and it's much safer to work around than nasty solvents.

Figure 10. Grizzly citrus degreaser.

Assembly

To assemble your lathe:

1. Stand the right and left supporting legs up approximately 47" apart, and get them reasonably aligned, as shown in **Figure 11**.

Figure 11. Stand legs approximately 47" apart to prepare for mounting the lathe.

⚠WARNING

The G0632 and its components are very heavy. Get lifting help or use power lifting equipment such as a fork lift to move heavy items.

2. Using the help of assistants, carefully lift the lathe onto the stands and align the mounting holes.

   Note: *The headstock end of the lathe is the heaviest and usually requires two people for lifting that end.*

Continued on next page ⟶

3. Secure the lathe assembly to the supporting legs with the (8) M10-1.5 x 25 cap screws and 10mm flat washers (see **Figure 12**).

Figure 12. Securing lathe assembly to supporting legs.

4. If you are bolting your lathe to the floor, skip to **Step 7**. Otherwise, move the tailstock, tool rest assembly, and headstock to one end of the lathe bed (see the **OPERATIONS** section beginning on **Page 18** for instructions for moving these components).

5. Use assistants to lift the light end of the lathe onto support blocks in preparation for installing the machine feet (see **Figure 13**).

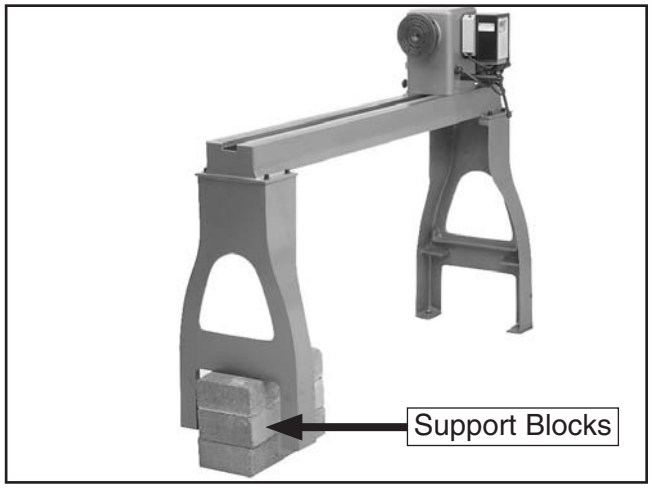


Figure 13. Example of supporting one end of lathe in preparation for installing the machine feet.

Note: *Use assistants to support and stabilize the lathe while you install the machine feet.*

6. Insert the machine feet into the mounting holes of the supporting legs, as shown in **Figure 14**. Do not tighten the top hex nut yet. Repeat **Steps 5–6** on the other legs.

Figure 14. Machine feet installed.

7. Place a level on the lathe bed and make necessary adjustments so that the bed is level from side-to-side and front-to-back.

   —If you are using the machine feet, adjust the top and bottom hex nuts on each leg to level the bed; then tighten the hex nuts to secure these adjustments.

   —If you are bolting your lathe to the floor, use shims under the legs to level the bed; then tighten the mounting fasteners.

8. Insert the tool rest into the tool rest base and tighten the tool rest lock lever (see **Figure 15**).

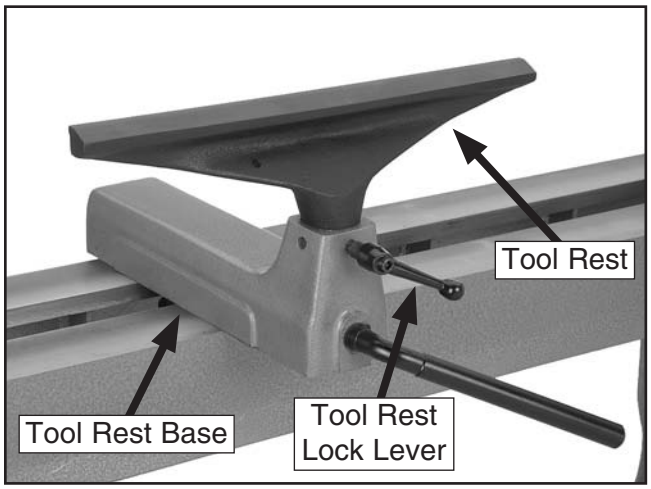


Figure 15. Tool rest installed on the tool rest base.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation. The test run consists of verifying the following: 1) The motor powers up and runs correctly and 2) the stop button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 36**.

If you cannot find a remedy, contact our Tech Support at (570) 546-9663 for assistance.

⚠WARNING

Before starting the lathe, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety features on this machine. Failure to follow this warning could result in serious personal injury or even death!

To test run your lathe:

1. Make sure you understand the safety instructions at the beginning of the manual and that the machine is setup properly.

2. Make sure all tools and objects used during setup are cleared away from the machine.

3. Connect the machine to the power source.

4. Push the EMERGENCY stop button in, then twist it clockwise so it pops out. When the button pops out, the switch is reset and ready for operation (see **Figure 16**).

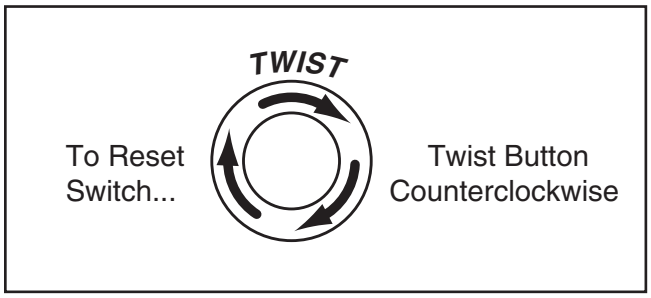


Figure 16. Resetting the EMERGENCY stop switch.

5. Verify that the machine is operating correctly by pressing the REV/FWD switch to FWD.

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

6. Press the REV/FWD switch to the center neutral position to stop the machine, and push in the EMERGENCY stop button.

7. WITHOUT resetting the EMERGENCY stop button, press the press the REV/FWD switch to FWD. The machine should not start.

   —If the machine does not start, the EMERGENCY stop button safety feature is working correctly. The **Test Run** is complete.

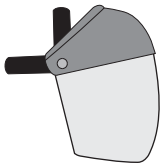
   —If the machine does start (with the EMERGENCY stop button pushed in), immediately disconnect power to the machine. The EMERGENCY stop button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

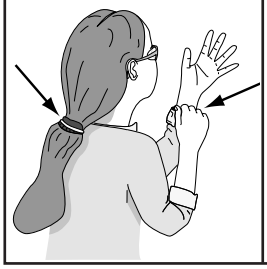
SECTION 4: OPERATIONS

Operation Safety

⚠WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.





⚠WARNING

Loose hair and clothing could get caught in the lathe and cause serious personal injury. Keep loose clothing and long hair away from moving parts of lathe.

NOTICE

If you have never used a wood lathe before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Adjusting Headstock

The Model G0632 headstock can be positioned anywhere along the lathe bed and swiveled 360°.

To position the headstock along the length of the lathe bed:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. Loosen the headstock lock handle (see **Figure 17**).

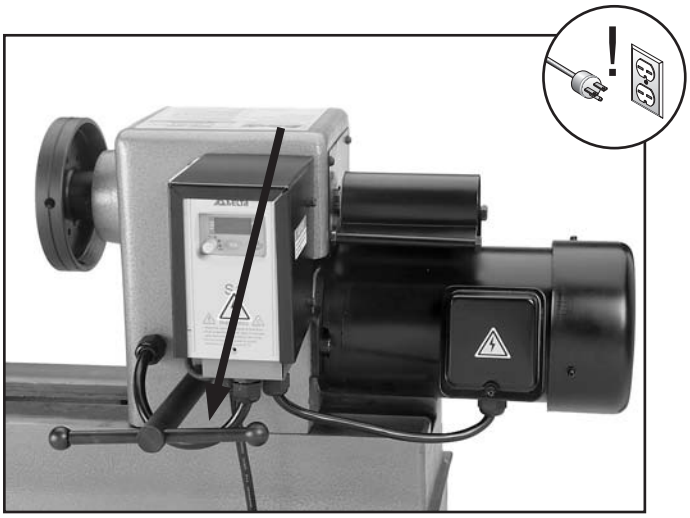


Figure 17. Headstock lock handle.

3. Slide the headstock to the desired location on the bed and use the headstock lock handle to secure the headstock in position.

   Note: *The large clamping hex nut underneath the headstock will require occasional adjusting to ensure proper clamping pressure of the headstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*

To swivel the headstock:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. Loosen the headstock lock handle (see **Figure 17**).

3. Pull the swivel pin out and rotate the headstock to the desired position (see **Figure 18**).

Figure 18. Pulling out the swivel pin.

4. To lock the headstock in place, release the swivel pin and make sure that it engages the headstock.

   Note: *The swivel pin can lock the headstock at 45°, 90°, 135°, 180°, 270°, and 360°.*

5. Re-tighten the headstock lock handle.

⚠WARNING

Always operate the lathe with the headstock firmly locked to the bed. Otherwise, serious personal injury may occur.

Adjusting Tailstock

The tailstock is equipped with a cam-action clamping system to secure it to the lathe bed. When the lever is tightened, a locking plate lifts up underneath the bed and secures the tailstock in place.

To position the tailstock along the length of the bed:

1. Loosen the tailstock lock handle and move the tailstock to the desired position along the bed (see **Figure 19**).

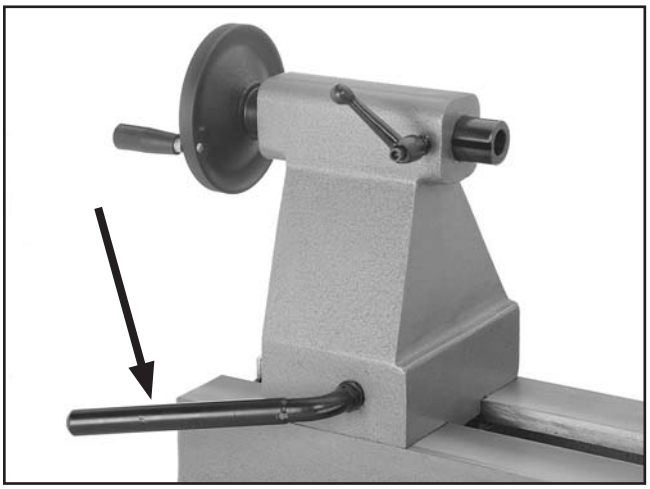


Figure 19. Tailstock lock handle.

2. Re-engage the tailstock lock handle to secure the tailstock to the bed.

   Note: *The large clamping hex nut underneath the tailstock will require occasional adjusting to ensure proper clamping pressure of the tailstock to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*

⚠WARNING

Always operate the lathe with the tailstock firmly locked to the bed. Otherwise, serious personal injury may occur.

Adjusting Tool Rest

The tool rest base is equipped with a cam-action clamping system to secure it to the lathe bed. When the tool rest base lock handle is tightened, a locking plate lifts up and secures the tool rest assembly to the bed. The tool rest can also be positioned and locked at a specific angle or height.

To position the tool rest assembly along the length of the lathe bed:

1. Loosen the tool rest base lock handle and move the tool rest assembly to the desired position on the lathe bed (see **Figure 20**).

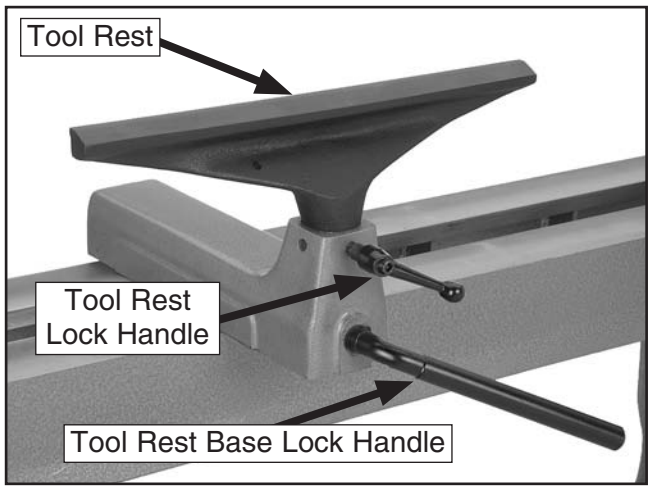


Figure 20. Tool rest controls.

2. Re-engage the tool rest base lock handle to secure the tool rest assembly in position.

   Note: *The large clamping hex nut underneath the tool rest base will require occasional adjusting to ensure proper clamping pressure of the tool rest assembly to the bed. Turn this hex nut in small increments to fine tune the clamping pressure as needed.*

⚠WARNING

Always operate the lathe with the tool rest assembly firmly locked in position. Otherwise, serious personal injury may occur.

To adjust the angle or height of the tool rest:

1. Loosen the tool rest lock handle and adjust the angle or height of the tool rest.

2. Position the tool rest approximately ¼" away from the workpiece and approximately ⅛" above the workpiece center line (see **Figure 21**).

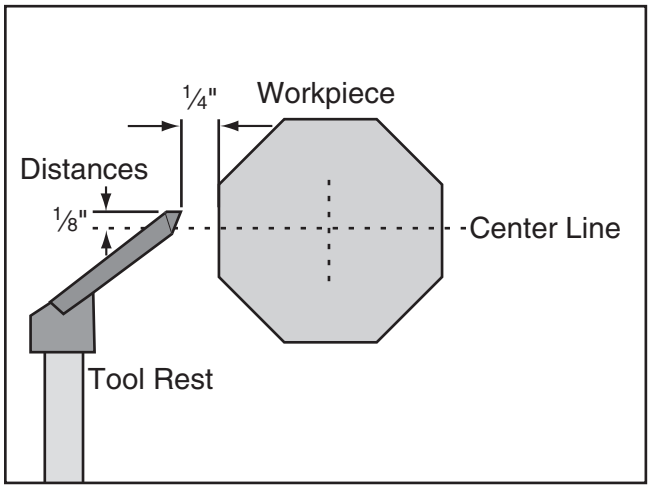


Figure 21. Tool rest position relative to workpiece.

3. Re-tighten the tool rest lock handle to secure the tool rest in position.

Installing/Removing Headstock Center

⚠WARNING

Make sure the headstock and tailstock centers are properly aligned before beginning any turning operation. See Aligning Centers on Page 38 for additional instructions on this procedure. Failure to observe this warning could result in the workpiece being thrown from the lathe resulting in serious personal injury.

The included spur center installs into the headstock spindle with an MT#2 tapered fit.

To install the headstock center:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. If the faceplate is installed on the spindle, remove it (see **Page 23** for detailed instructions).

3. Make sure the mating surfaces of the center and spindle are free of debris and oily substances before inserting the center.

4. Insert the tapered end of the center into the spindle, and push it in with a quick, firm motion (see **Figure 22**).

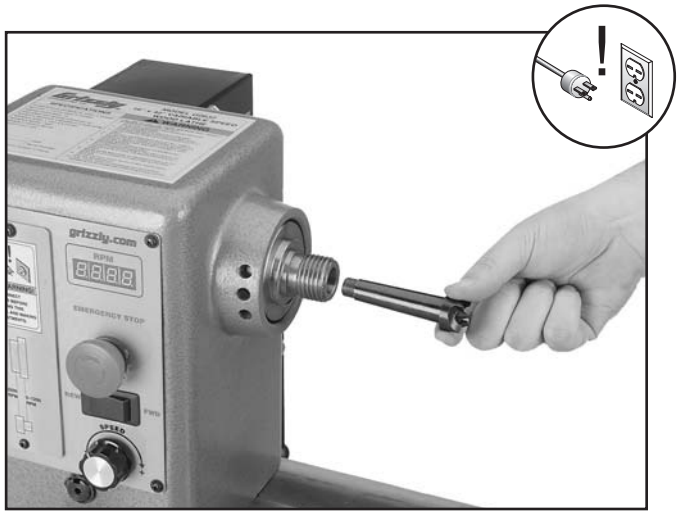


Figure 22. Installing center into the headstock spindle.

5. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull easily.

To remove the headstock center with the knockout tool:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.

3. Insert the knockout tool through the outbound end of the spindle and firmly tap the center, catching it as it falls (see **Figure 23**).

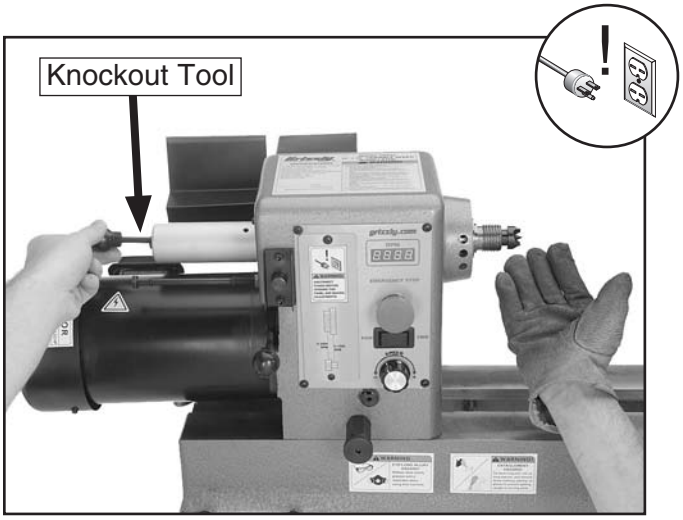


Figure 23. Removing the headstock center.

Installing/Removing Tailstock Center

The included live center installs into the tailstock quill with an MT#2 tapered fit.

To install the center into the tailstock quill:

1. Loosen the quill lock handle and rotate the tailstock handwheel until the quill extends out about 1" (see **Figure 24**).

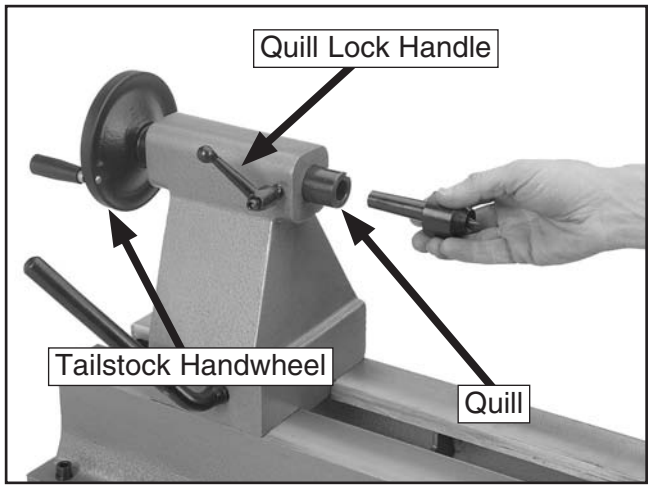


Figure 24. Installing center into tailstock quill.

2. Make sure the mating surfaces of the center and quill are free of debris and oily substances before inserting the center.

3. Insert the tapered end of the center into the tailstock quill as shown in **Figure 24**.

4. Make sure the center is securely installed by attempting to pull it out by hand—a properly installed center will not pull out by hand.

5. Make sure the center of the quill lock handle is aligned with the quill keyway (see **Figure 25**) to ensure that the tailstock center and quill will not freely rotate under load.

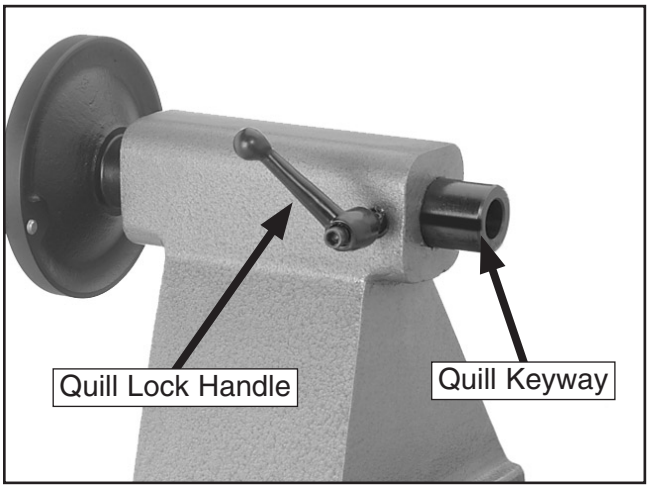


Figure 25. Quill lock handle aligned with quill keyway.

6. Secure the quill in place by re-tightening the quill lock handle.

To remove the center from the tailstock quill:

1. Loosen the quill lock handle.

2. Hold a clean rag under the spindle or wear a glove to catch the center when you remove it.

3. Rotate the tailstock handwheel counterclockwise—the tailstock quill will retract back into the quill causing the center to be forced out of the quill.

⚠WARNING

The tailstock quill must always be locked in place during lathe operation. Before tightening the quill lock handle, it must be properly aligned with the quill keyway. Otherwise, the workpiece can be thrown from the lathe causing serious personal injury or death.

Headstock Faceplate

To mount a workpiece to the faceplate, refer to **Faceplate Turning** on **Page 31**.

The faceplate can be installed only if the headstock center has been removed.

To install the headstock faceplate:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. Depress the spindle lock and rotate the spindle by hand until the spindle lock slips into the locking slot on the spindle (see **Figure 26**).

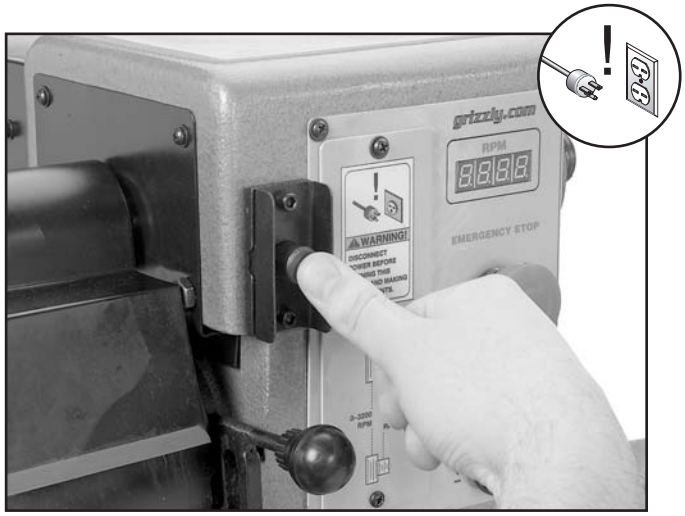


Figure 26. Depressing the spindle lock.

3. Maintain pressure on the spindle lock and thread the faceplate onto the spindle until it is snug.

4. Using the included 4mm hex wrench, tighten the three set screws along the inside diameter of the faceplate to secure it to the spindle (see **Figure 27**).

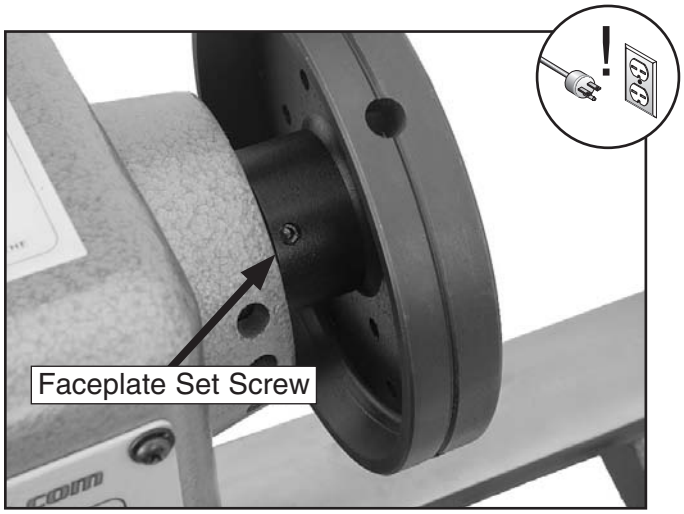


Figure 27. Headstock faceplate set screw.

⚠WARNING

To prevent the faceplate and workpiece separating from the spindle during operation, the headstock faceplate MUST be firmly threaded onto the spindle and secured in place by fully tightening the three faceplate set screws. If these instructions are not properly performed, serious personal injury could occur.

Note: *To remove the headstock faceplate, disconnect the lathe from the power source and perform the steps above in reverse.*

Changing Speed Ranges

The Model G0632 has two speed ranges: 1) the low range from 100 to 1200 RPM which provides a greater torque, and 2) the high range from 250 to 3200 RPM.

Refer to the speed recommendations chart (see **Figure 28**) to choose the appropriate RPM for your operation. Then choose the speed range that will include the selected RPM.

Diameter of Work-piece	Roughing RPM	General Cutting RPM	Finishing RPM
Under 2"	1520	3200	3200
2–4"	760	1600	2480
4–6"	510	1080	1650
6–8"	380	810	1240
8–10"	300	650	1000
10–12"	255	540	830
12–14"	220	460	710
14–16"	190	400	620

Figure 28. Model G0632 speed recommendations.

To change speed ranges:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!
2. Remove the front belt access panel (see **Figure 29**).

Figure 29. Belt access panel removed.

3. Use the included 8mm hex wrench to loosen the motor mount cap screw just under the motor tensioning handle (see **Figure 30**).

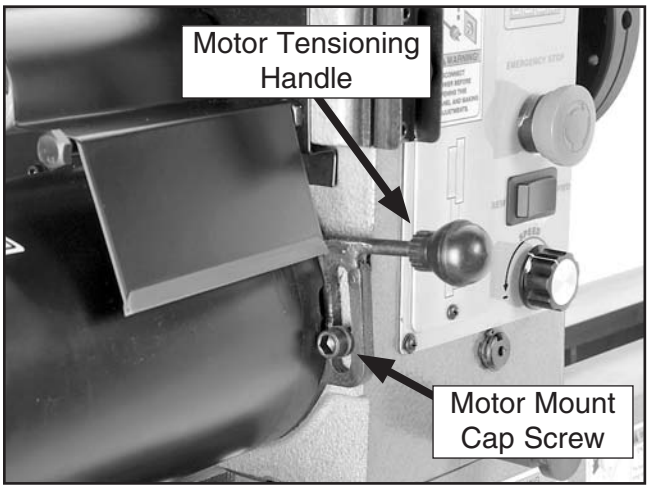


Figure 30. Motor tensioning handle and motor mount cap screw.

4. Use the motor tensioning handle to lift the motor assembly all the way up and re-tighten the motor mount cap screw—this will hold the motor in place while you change the belt position.

5. Reach into the belt access cavity and roll the belt onto the desired set of pulleys (see **Figure 31**).

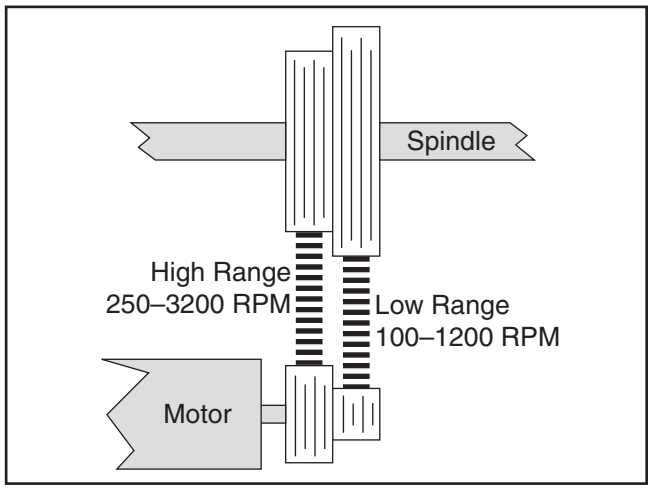


Figure 31. Speed range belt positions.

⚠WARNING

Always choose the correct speed for your particular turning project. As a general rule, the larger the workpiece diameter, the slower the speed. Always start the lathe on slow speed. Failure to heed this warning could lead to serious personal injury.

6. Loosen the motor mount cap screw and lower the motor.

7. Apply downward pressure on the motor tensioning handle to properly tension the drive belt and re-tighten the motor mount cap screw.

Note: *When properly tensioned, the belt should deflect about ¼" when moderate pressure is applied to the belt mid-way between the upper and lower pulley (see* ***Figure*** **32***).*

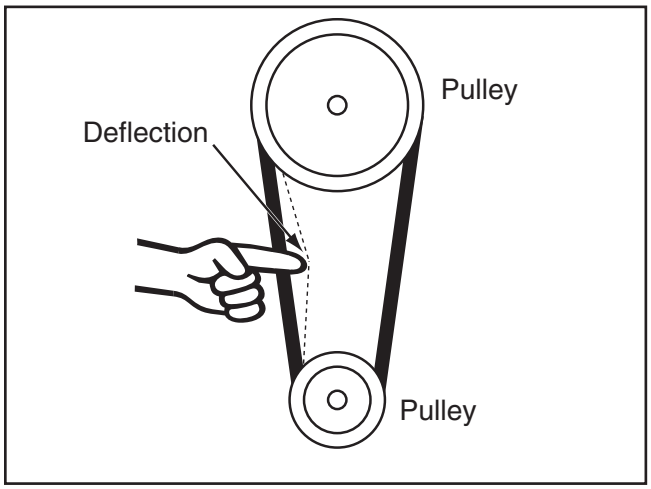


Figure 32. Testing for ¼" belt deflection.

8. Replace the front belt access panel.

Indexing

Indexing on a lathe is typically used for workpiece layout and other auxiliary operations that require equal distances around the workpiece circumference, such as clock faces or inlays.

By inserting the indexing pin into one of the three outer indexes of the Model G0632 spindle housing and engaging one of the eight inner indexes in the spindle, the workpiece can be positioned to one of 24 equal points (see **Figure 33**).

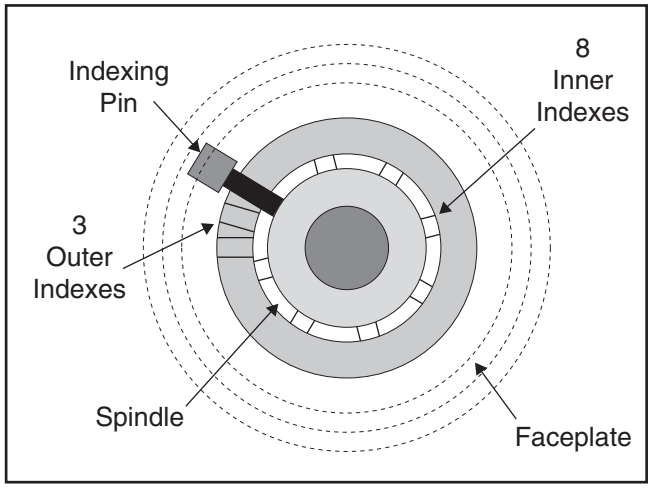


Figure 33. Model G0632 indexing configuration.

To use the indexing feature, place the indexing pin into one of the indexing holes in the headstock as shown in **Figure 34**. This will hold the spindle and workpiece at the desired indexed position.

Figure 34. Indexing pin and indexing holes.

⚠CAUTION

Always disconnect the lathe from power before using the indexing feature of this lathe. Do NOT start the lathe with the indexing pin inserted into the spindle; otherwise property damage and personal injury could result.

Selecting Turning Tools

Lathe tools come in a variety of shapes and sizes, and usually fall into five major categories.

- **Gouges**—Mainly used for rough cutting, detail cutting, and cove profiles. The rough gouge is a hollow, double-ground tool with a round nose, and the detail gouge is a hollow, double-ground tool with either a round or pointed nose.

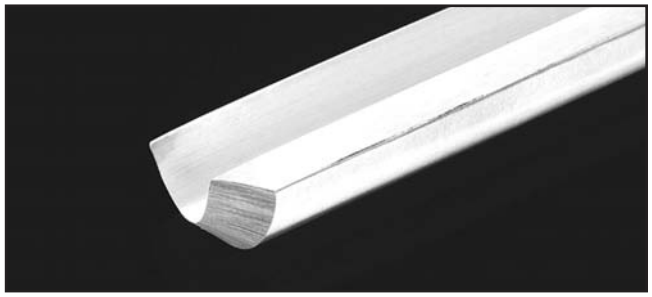


Figure 35. Example of a gouge.

- **Skew Chisel**—A very versatile tool that can be used for planing, squaring, V-cutting, beading, and parting off. The skew chisel is flat, double-ground with one side higher than the other (usually at an angle of 20°–40°).

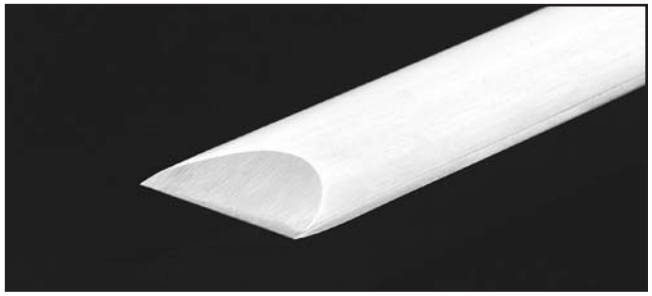


Figure 36. Example of a skew chisel.

- **Scrapers**—Typically used where access for other tools is limited, such as hollowing operations. This is a flat, double-ground tool that comes in a variety of profiles (round nose, spear point, square nose, etc.) to match many different contours.

Figure 37. Example of a round nose scraper.

- **Parting Tools**—Used for sizing and cutting off work. This is a flat tool with a sharp pointed nose that may be single- or double-ground.

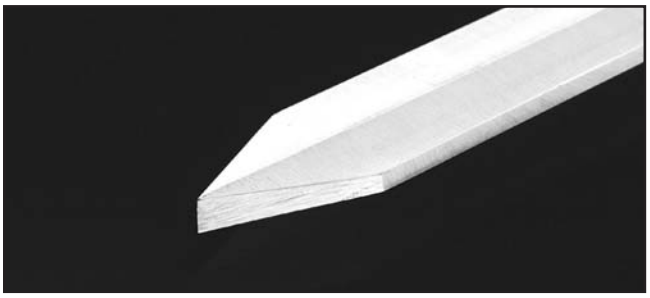


Figure 38. Example of a parting tool.

- **Specialty Tools**—These are the unique, special function tools to aid in hollowing, bowl making, cutting profiles, etc. The Swan Neck Hollowing Tool shown on **Page 34** is a good example of a speciality tool.

Spindle Turning

Spindle turning is the operation performed when a workpiece is mounted between the headstock and the tailstock (see **Figure 39**).

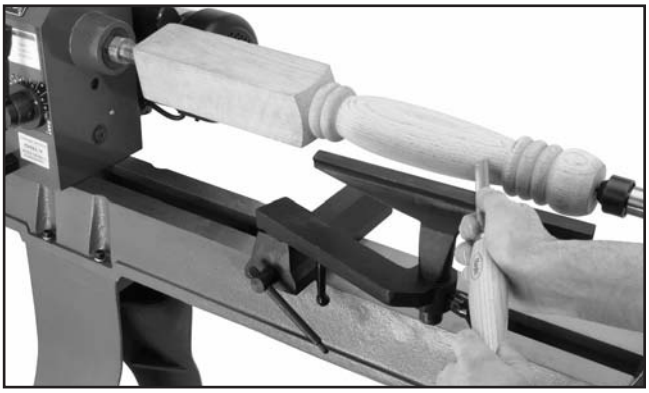


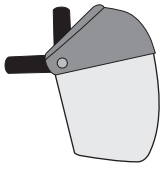
Figure 39. Typical spindle turning operation.

⚠WARNING

Make sure the headstock and tailstock centers are properly aligned before beginning any turning operation. See Aligning Centers on Page 38 for additional instructions on this procedure. Failure to observe this warning could result in the workpiece being thrown from the lathe resulting in serious personal injury.

⚠WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.



To set up a spindle turning operation:

1. Find the center point of both ends of your workpiece by drawing diagonal lines from corner to corner across the end of the workpiece (see **Figure 40**).

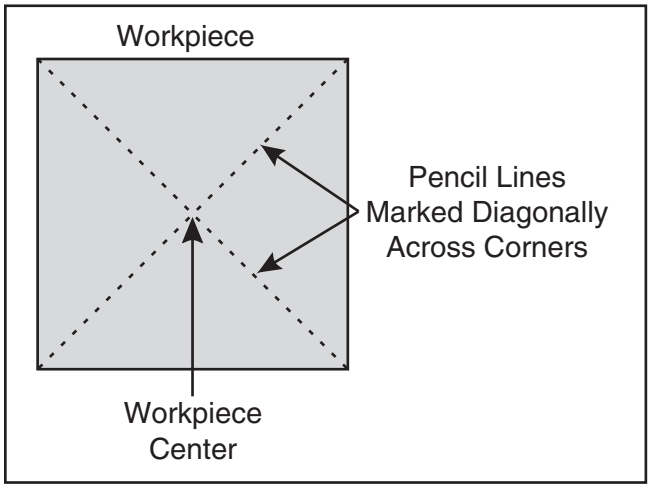


Figure 40. Workpiece marked diagonally from corner to corner to determine the center.

2. Using a wood mallet, tap the point of the spur center into the center of the workpiece on both ends, leaving an indented center mark.

3. Using a ¼" drill bit, drill a ¼" deep hole at the center mark on the end of the workpiece to be mounted on the headstock spur center.

4. To help embed the spur center into the workpiece, cut ⅛" deep saw kerfs in the same end of the workpiece along the diagonal lines marked in **Step 1**.

5. If your workpiece is over 2" x 2", cut the corners off the workpiece length-wise to make turning safer and easier.

6. Drive the spur center into the end center mark of the workpiece with a wood mallet to embed it at least ¼" into the workpiece (see **Figure 41**).

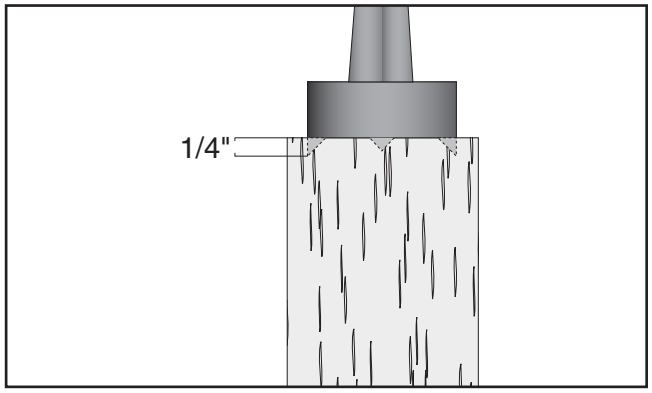


Figure 41. Spur center properly embedded.

7. With the workpiece still attached, insert the spur center into the headstock spindle (refer to **Installing Headstock Center** on **Page 21** for additional instructions).

   Note: *Use the tool rest to support the opposite end of the workpiece so that the workpiece and spur center do not separate.*

8. Install the live center into the tailstock quill and tighten the quill lock handle to lock the quill in position (refer to **Page 22** for additional instructions).

9. Slide the tailstock toward the workpiece until the point of the live center touches the workpiece center mark, then lock the tailstock in this position.

10. Loosen the quill lock handle and rotate the tailstock handwheel to push the live center into the workpiece at least a ¼".

⚠WARNING

Do not press the workpiece too firmly with the tailstock or the bearings will bind and overheat. Likewise, do not adjust too loosely or the workpiece will spin off the lathe. Use good reason and care, otherwise, serious personal injury could result.

Continued on next page ⟶

11. Position the tool rest approximately ¼" away from the workpiece and approximately ⅛" above the workpiece center line (see **Figure 42**).

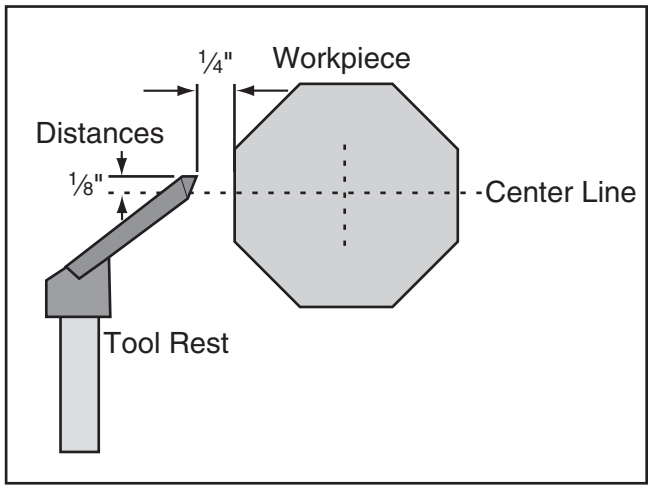


Figure 42. Tool rest position relative to workpiece.

12. Before beginning lathe operation, rotate the workpiece by hand to ensure that there is safe clearance on all sides.

⚠WARNING

Keep the lathe tool resting on the tool rest the ENTIRE time that it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, the spinning workpiece could force the lathe tool out of your hands or entangle your hands with the workpiece. Failure to heed this warning could result in serious personal injury.

Spindle Turning Safety Tips:

- When turning the lathe ***ON***, stand away from the path of the spinning workpiece until the lathe reaches full speed and you can verify that the lathe will not throw the workpiece.
- Use the slowest speed when starting or stopping the lathe.
- Select the right speed for the size of workpiece that you are turning:

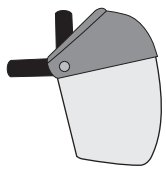
  —Use the slower speeds for large workpieces (diameters of 4" and over) and for rough cutting.

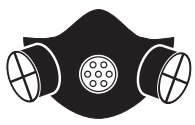
  —Use the middle range speeds for workpiece diameters of 2–4".

  —Use the faster speeds for workpieces under 2".
- Keep the turning tool on the tool rest the ENTIRE time that it is in contact with the workpiece.
- Learn the correct techniques for each tool you will use. If you are unsure about how to use the lathe tools, read books or magazines about lathe techniques and seek training from experienced and knowledgeable lathe users.

⚠WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear a face shield and respirator when operating this machine.





Faceplate Turning

Faceplate turning is when a workpiece is mounted to the faceplate, which is then mounted to the headstock spindle. This type of turning is usually done with open-faced workpieces like bowls or plates.

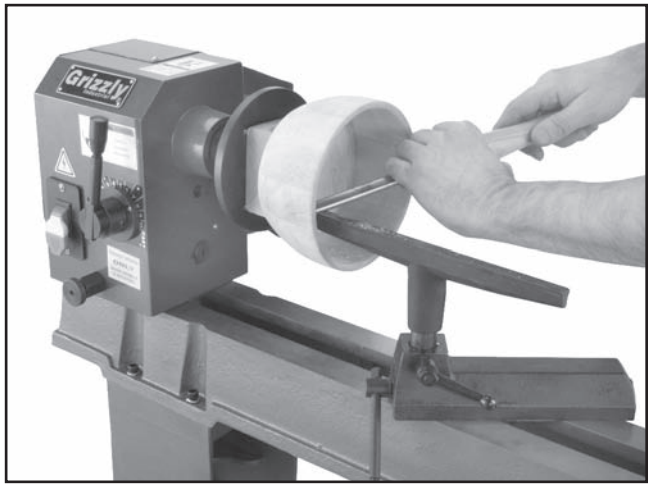


Figure 43. Typical faceplate turning operation.

To mount the workpiece onto the faceplate:

1. Mark the workpiece center as in **Spindle Turning** (see **Page 28**).

   Note: *Cut off corners of the workpiece to make it as close to "round" as possible.*

2. Center the faceplate on the workpiece and attach it with wood screws that do not have tapered heads (see **Figure 44**).

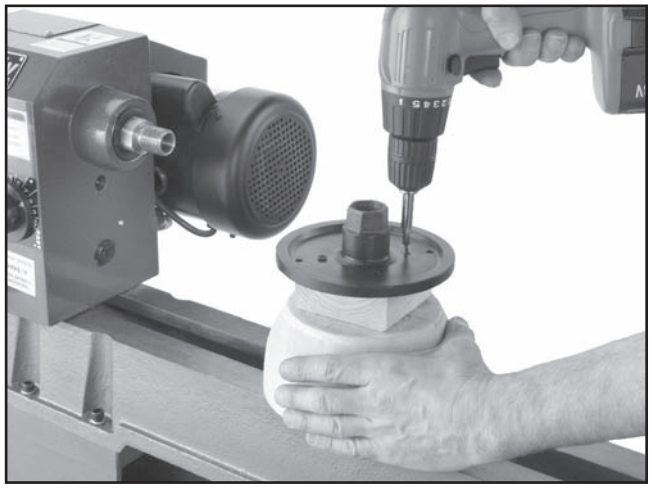


Figure 44. Typical attachment of faceplate to workpiece (shown with backing block).

NOTICE

Only use tap screws or wood screws with non-tapered heads (Figure 45) to attach the faceplate to the workpiece. Do NOT use dry-wall screws or screws with tapered heads because they can split the faceplate, or the screws may snap off during operation.

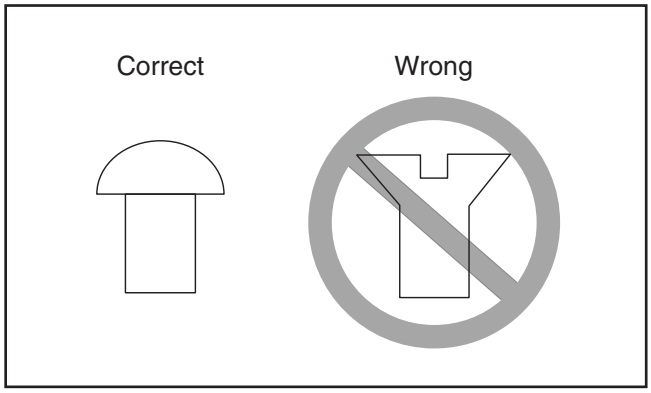


Figure 45. Correct and incorrect screw types for mounting faceplate to workpiece.

3. Thread and secure the faceplate onto the headstock spindle (refer to **Headstock Faceplate** on **Page 23** for faceplate mounting instructions).

If wood screws cannot be placed in the workpiece, then the faceplate can be mounted on a backing block that is glued to the workpiece.

To mount your workpiece to a backing block:

1. Make the backing block from a piece of scrap wood that is flat on both sides.

2. Locate and mark the center of both the workpiece and backing block.

3. Drill a ¼" hole through the center of the backing block.

4. Looking through the hole in the backing block to line up the center with the workpiece, glue and clamp the backing block to the workpiece.

   Note: *Allow the glue to cure according to the manufacturer's instructions.*

Outboard Turning

Outboard turning is a variation of faceplate turning and is usually done when the stock diameter is greater than 12". For the size of this particular lathe and its minimum turning speed, we recommend a maximum diameter of 17".

Figure 46 depicts the lathe setup at 90° for turning larger workpieces. When turning in this manner, you must use a free standing tool rest (not included).

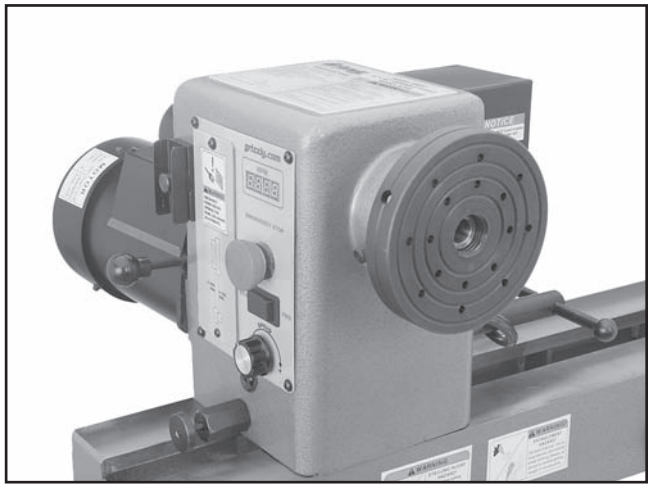


Figure 46. Headstock set at 90°.

⚠WARNING

Keep the lathe tool resting on a tool rest the ENTIRE time that it is in contact with workpiece or when preparing to make contact between lathe tool and workpiece. Otherwise, the spinning workpiece could force the lathe tool out of your hands or entangle your hands into the workpiece. Failure to heed this warning could result in serious personal injury.

Sanding/Finishing

After the turning operations are complete, the workpiece can be sanded and finished before removing it from the lathe (see **Figure 47**).

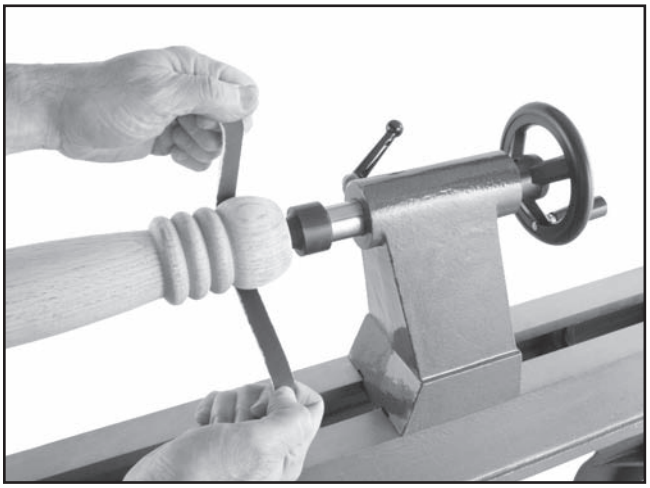
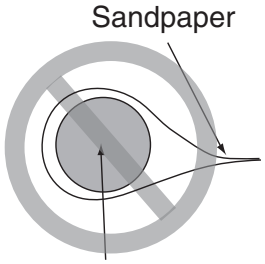


Figure 47. Typical sanding operation.

Note: *Whenever sanding or finishing, move the tool rest holder out of the way to increase personal safety and gain adequate working room.*



⚠WARNING

Wrapping the sandpaper completely around the workpiece could pull your hands into the moving workpiece and may cause serious injury. Never wrap sandpaper or finishing materials completely around the workpiece.

SECTION 5: ACCESSORIES

G1194—3-Jaw Chuck
A "must have" for the serious wood turner. This 3-jaw chuck is a self-centering style chuck used mostly for round work. All three jaws tighten together at the same time. Jaws are reversible for expanded work holding capacity. *Threaded insert required for mounting!*

Figure 48. Model G1194 3-Jaw Chuck.

G1082—4-Jaw Chuck
Another "must have" for the serious wood turner. This 4-jaw chuck is an independent type chuck that is used for square and odd-shaped pieces. Each jaw tightens individually and can be turned around to hold larger dimension workpieces. *Threaded insert required for mounting!*

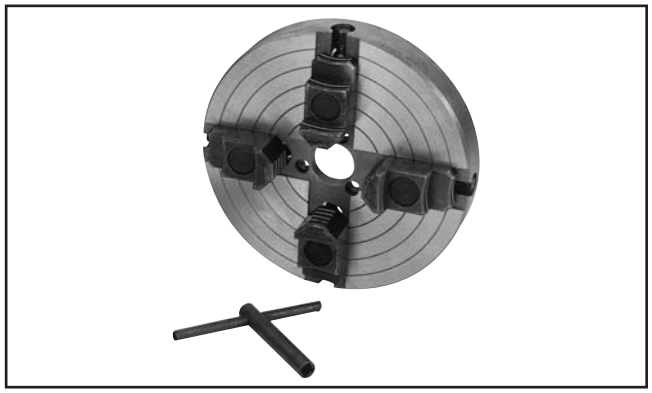


Figure 49. Model G1082 4-Jaw Chuck.

G3167—1¼" x 8 TPI RH Threaded Insert
This threaded insert is required to mount a 3- or 4-jaw chuck to your wood lathe.

T10117—Big Mouth Dust Hood with Stand
Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 16⅜" x 12⅞" hood adjusts from 23" to 43" high. Every shop needs one of these!

Figure 50. T10117 Big Mouth Dust Hood.

H5954—Robert Sorby Stebcentre MT#2
Razor sharp teeth bite into the workpiece for secure operation and the spring loaded center point controls the amount of drive or slip. This patented feature helps avoid the problem of 'dig-in'. Production turners can also load and unload their work while the lathe is still running!

Figure 51. Robert Sorby Stebcentre.

Call 1-800-523-4777 To Order

H6542—Robert Sorby HSS 8-PC Turning Set
If quality is king, then start bowing. Made in England, these Robert Sorby lathe tools are especially for the perfectionist wood turner. Includes ¾" roughing gouge, ⅜" & ½" spindle gouge, ⅜" bowl gouge, ¾" standard skew, 3/16" diamond side cut scraper, 1" square scraper and ½" round scraper. Full size handles are 16"–19".

Figure 52. Model H6542 Robert Sorby 8-PC Set.

G9863—8-PC HSS Lathe Chisel Set
This chisel set features beautiful 8" ash handles with brass ferrules and 3½" long, high speed steel blades. Chisels include: ½" parting tool, ½" straight chisel, ½" double bevel skew, ½" roundnose, ¾" gouge, ⅜" gouge, ½" diamond point and ⅜" veiner. Set comes in fitted wooden case, and is very competitively priced!

Figure **53**. Model G9863 8-PC Chisel Set.

H6204—Precision Drill Chuck 1/32"–⅝" x JT#3
G1676—Drill Chuck Arbor MT#2 x JT#3
The best way to bore holes with your lathe!

H0507—20" Swan Neck Hollowing Tool
H0508—24" Swan Neck Hollowing Tool
An excellent choice for blind turning or undercutting where reach is restricted. H0507 is designed for end grain use while H0508 (with a more substantial steel cross section) is designed for both end grain and side grain (bowl) use.

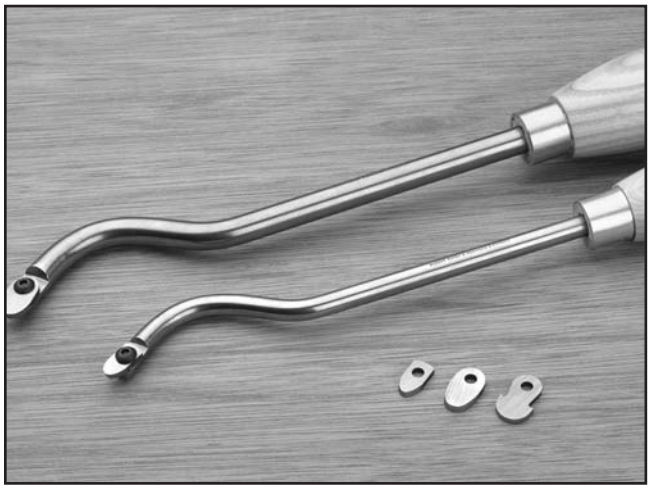


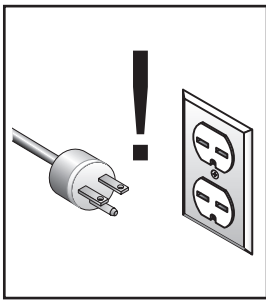
Figure 54. Swan Neck Hollowing Tools.

H1064—6-PC Deluxe HSS Lathe Chisel Set
This deluxe chisel set features beefy ash handles for unsurpassed control, brass ferrules and high speed steel blades. Includes: a 17" long 13/16" Parting Tool, 13/16" Round Nose and ⅜" Gouge; a 19" long 1" Skew, a ⅝" Gouge and a 22¾" long ⅜" Gouge. Comes in a beautiful blow molded carrying case. An extremely popular set!

Figure 55. Model H1064 6-PC Chisel Set.

Call 1-800-523-4777 To Order

SECTION 6: MAINTENANCE



⚠WARNING
Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check:
- Loose mounting bolts.
- Damaged centers or faceplate.
- Worn or damaged wires.
- Any other unsafe condition.

Weekly Maintenance:
- Clean off dust buildup.
- Clean and lubricate lathe bed, spindle, and quill.

Monthly Check:
- Belt tension, damage, or wear.
- Clean out dust buildup from inside belt/pulley cavity.

Cleaning

Cleaning the Model G0632 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Remove and debris or oily substances from the inside of the spindle and quill.

Lathe Bed

Protect the unpainted cast iron lathe bed by wiping it clean after every use—this ensures moisture from wood dust does not remain on the bare metal surfaces.

Keep your lathe bed rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9.

Lubrication

All bearings for the Model G0632 are lubricated and sealed at the factory, and do not need additional lubrication.

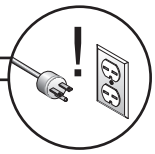
Wipe a lightly oiled shop rag on the outside of the headstock spindle. DO NOT allow any oil to get on the inside mating surfaces of the spindle.

Use the tailstock handwheel to extend the quill out to the furthest position and apply a thin coat of white grease to the outside of the quill. DO NOT allow any oil or grease to get on the inside mating surfaces of the quill.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix or adjust your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

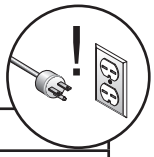
Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Emergency stop push-button is engaged/faulty.	1. Rotate clockwise slightly until it pops out/replace it.
	2. Motor connection wired incorrectly.	2. Correct motor wiring connections.
	3. FWD/REV switch is at fault.	3. Replace faulty FWD/REV switch.
	4. Speed rotary switch is at fault.	4. Replace bad speed rotary switch.
	5. Wiring is open/has high resistance.	5. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.
	6. Motor is at fault.	6. Test/repair/replace.
	7. Frequency inverter is at fault.	7. Replace.
Machine stalls or is underpowered.	1. Feed rate/cutting speed too fast for task.	1. Decrease feed rate/cutting speed.
	2. Belt slipping.	2. Replace bad belt and re-tension (see **Page 38**).
	3. Motor connection is wired incorrectly.	3. Correct motor wiring connections.
	4. Pulley slipping on shaft.	4. Replace loose pulley.
	5. Motor bearings are at fault.	5. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
	6. Machine is undersized for the task.	6. Use sharp lathe bits and chisels; reduce the feed rate/depth of cut.
	7. Motor has overheated.	7. Clean off motor, let cool, and reduce workload.
	8. Speed rotary switch at fault.	8. Replace bad speed rotary switch.
	9. Motor is at fault.	9. Test/repair/replace.
Machine has vibration or noisy operation.	1. Motor or component is loose.	1. Inspect/replace stripped or damaged bolts/nuts, and re-tighten with thread locking fluid.
	2. Belt worn or loose.	2. Inspect/replace belts (see **Page 38**).
	3. Motor fan is rubbing on fan cover.	3. Replace dented fan cover; replace loose/damaged fan.
	4. Pulley is loose.	4. Replace shaft, pulley, setscrew, and key as required.
	5. Machine is incorrectly mounted or sits unevenly on floor.	5. Tighten/replace anchor studs in floor; relocate/shim machine.
	6. Motor mount loose/broken.	6. Tighten/replace.
	7. Workpiece, center, or faceplate is at fault.	7. Center workpiece in center or faceplate; reduce RPM; replace defective center or faceplate.
	8. Motor bearings are at fault.	8. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.

Wood Lathe Operation



SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Vibration noise while machine is running; noise changes when speed is changed.	1. Belt cavity cover(s) loose.	1. Tighten the screws that mount the belt cavity cover(s); if necessary install a soft, vibration dampening material between the belt cover and the headstock casting.
Vibration noise while machine is running; noise remains constant when speed is changed.	1. Dented fan cover on motor.	1. Replace or adjust fan cover. Inspect motor fan and replace if damaged.
Excessive vibration.	1. Workpiece mounted incorrectly. 2. Workpiece warped, out of round, or is flawed. 3. Spindle speed is set too fast for mounted workpiece. 4. Lathe is resting on an uneven surface. 5. Motor mount bolts are loose. 6. Belt is worn or damaged. 7. Spindle bearings are worn.	1. Re-mount workpiece, making sure that centers are embedded in true center of workpiece. 2. Cut workpiece to correct, or use a different workpiece. 3. Reduce the spindle speed. 4. Shim stand or adjust feet on stand to remove any wobbles present in the stand. 5. Tighten motor mount bolts. 6. Replace belt (see **Page 38**). 7. Replace spindle bearings.
Chisels grab or dig into workpiece.	1. Tool rest set too low. 2. Tool rest set too far from workpiece. 3. Wrong chisel/tool being used. 4. Chisel/tool dull.	1. Set tool rest higher. See **Page 30** for how to properly set the tool rest height. 2. Move the tool rest closer to the workpiece. See **Page 30** for the proper workpiece/tool rest clearance. 3. Use the correct chisel/tool; educate yourself by reading books, trade magazines, or seeking help from an experienced lathe operator. 4. Sharpen or replace the chisel/tool you are using.
Bad surface finish.	1. Wrong spindle speed. 2. Dull chisel or wrong chisel being used for the operation.	1. Use trial-and-error to find a better spindle speed. 2. Sharpen chisel or try a different chisel.
Inaccurate turning results from one end of the workpiece to the other.	1. Headstock and tailstock are not properly aligned with each other.	1. Realign the tailstock to the headstock (see **Page 38**).
Tailstock moves.	1. Tailstock mounting bolt loose. 2. Bed surface is oily or greasy.	1. Tighten. 2. Clean bed surface to remove excess oil/grease.
Can't remove tapered tool from tailstock barrel.	1. Tailstock barrel had not retracted all the way back into the tailstock. 2. Debris was not removed from taper before inserting into barrel.	1. Turn the barrel handwheel until it forces taper out of barrel. 2. Always make sure that taper surfaces are clean.

Aligning Centers

To ensure accurate and safe turning results, the headstock and tailstock centers must be aligned with one another.

To align the centers:

1. With the headstock and tailstock centers installed, slide the tailstock up to the headstock.

2. Loosen the headstock lock handle and swivel the headstock so the tip of the centers touch, as illustrated in **Figure 56**, then lock the headstock in place.

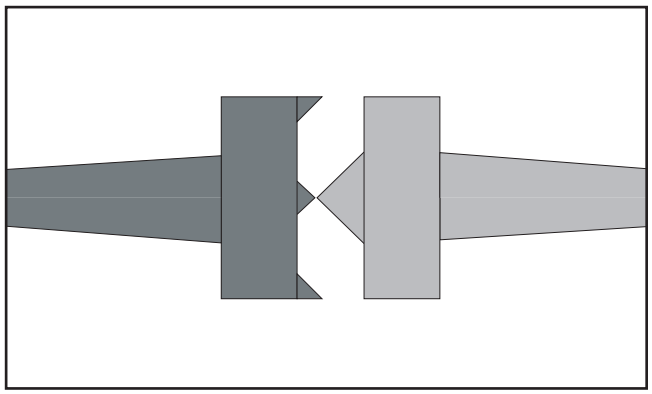


Figure 56. Center tips touching to ensure alignment.

Changing Belt

To change the belt:

1. DISCONNECT THE LATHE FROM THE POWER SOURCE!

2. Remove the front belt access panel (see **Figures 57 & 58**).

3. Remove the spindle handwheel safety cover and the two long hex bolts.

4. Use a 3mm hex wrench to loosen the three set screws in the spindle handwheel and remove it from the spindle.

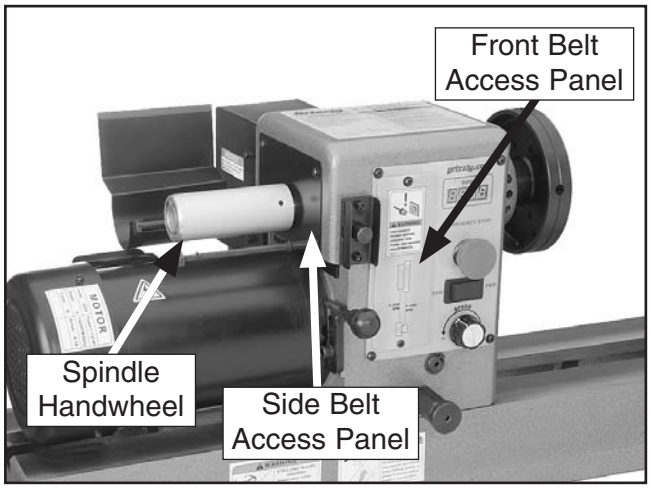


Figure 57. Spindle handwheel and belt access panels.

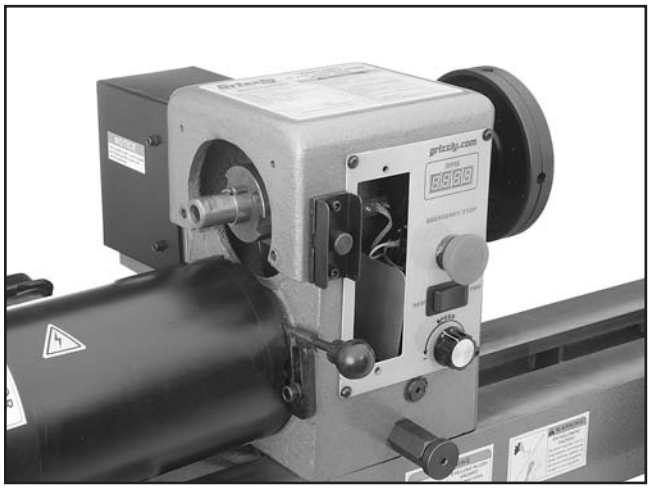


Figure 58. Headstock with spindle handwheel and belt access panels removed.

5. Loosen the motor mount cap screw and secure the motor in the upper position (see **Changing Speed Ranges** on **Page 24** for additional instructions).

6. Roll the belt off the motor (lower) pulleys, then pull the belt off the spindle pulleys and out the side belt access.

7. Install the new belt by reversing **Step 6.**

8. Re-tension the belt, and re-install the side belt access panel, the spindle handwheel and cover, and the front belt access panel.

   Note: *When properly tensioned, the belt should deflect about ¼" when moderate pressure is applied to the belt mid-way between the upper and lower pulley.*

Electrical Components

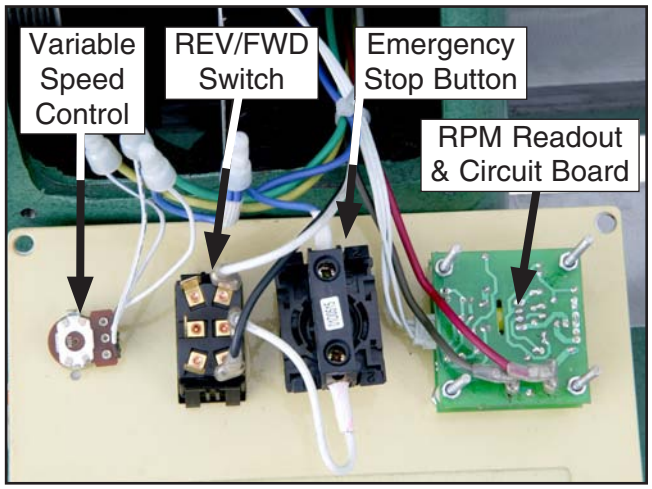


Figure 59. Model G0632 control panel wiring (shown from the back of the panel).

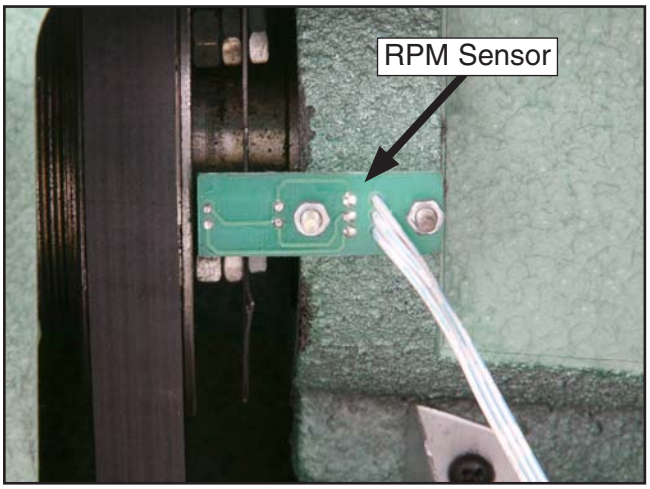


Figure 61. Model G0632 RPM sensor wiring.

Figure 60. Model G0632 motor junction box wiring.

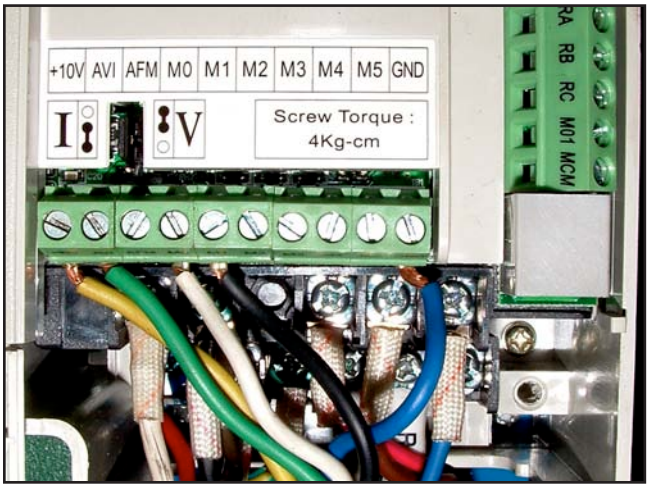
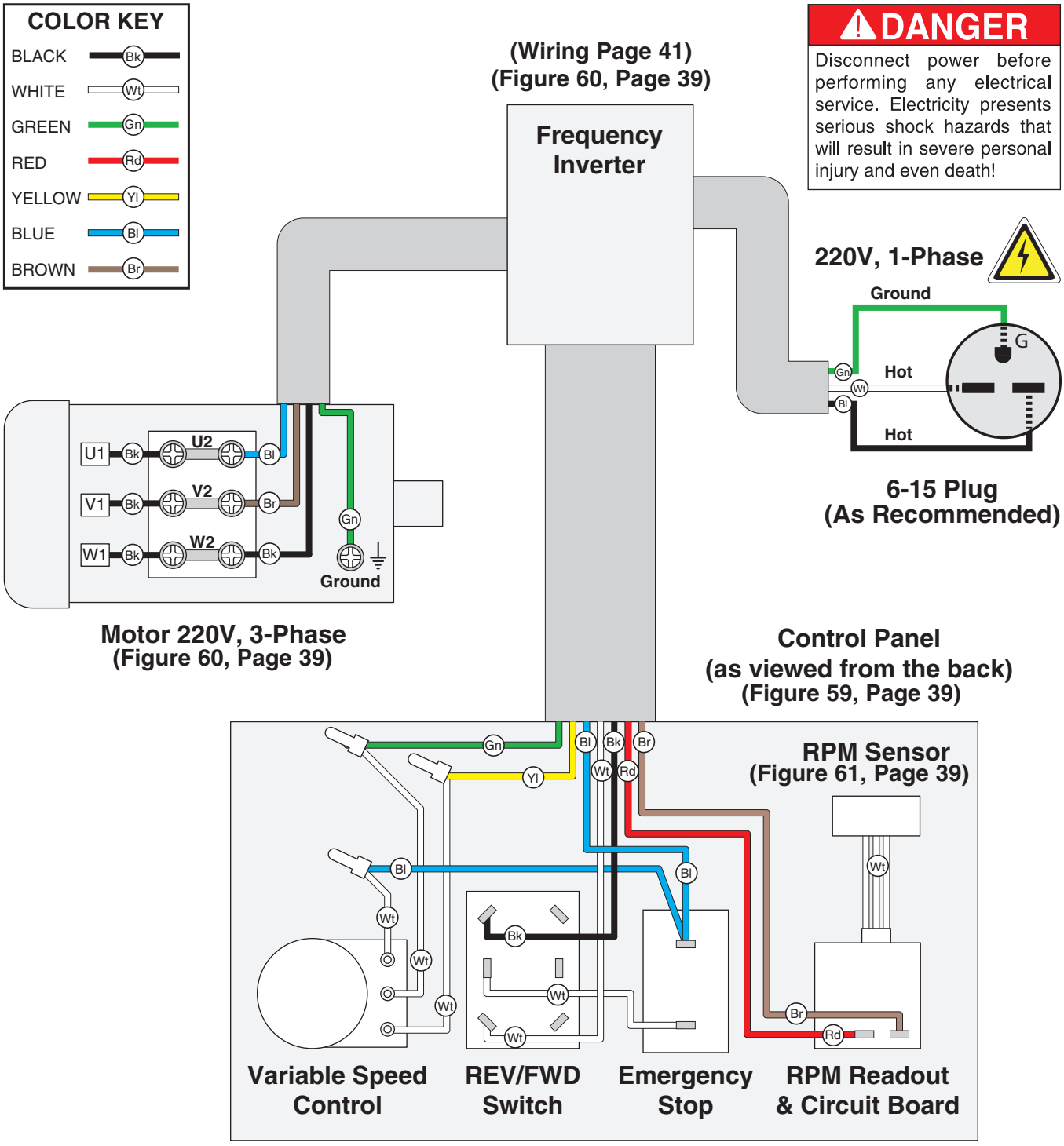


Figure 62. Model G0632 frequency inverter wiring.

Wiring Diagram Overview



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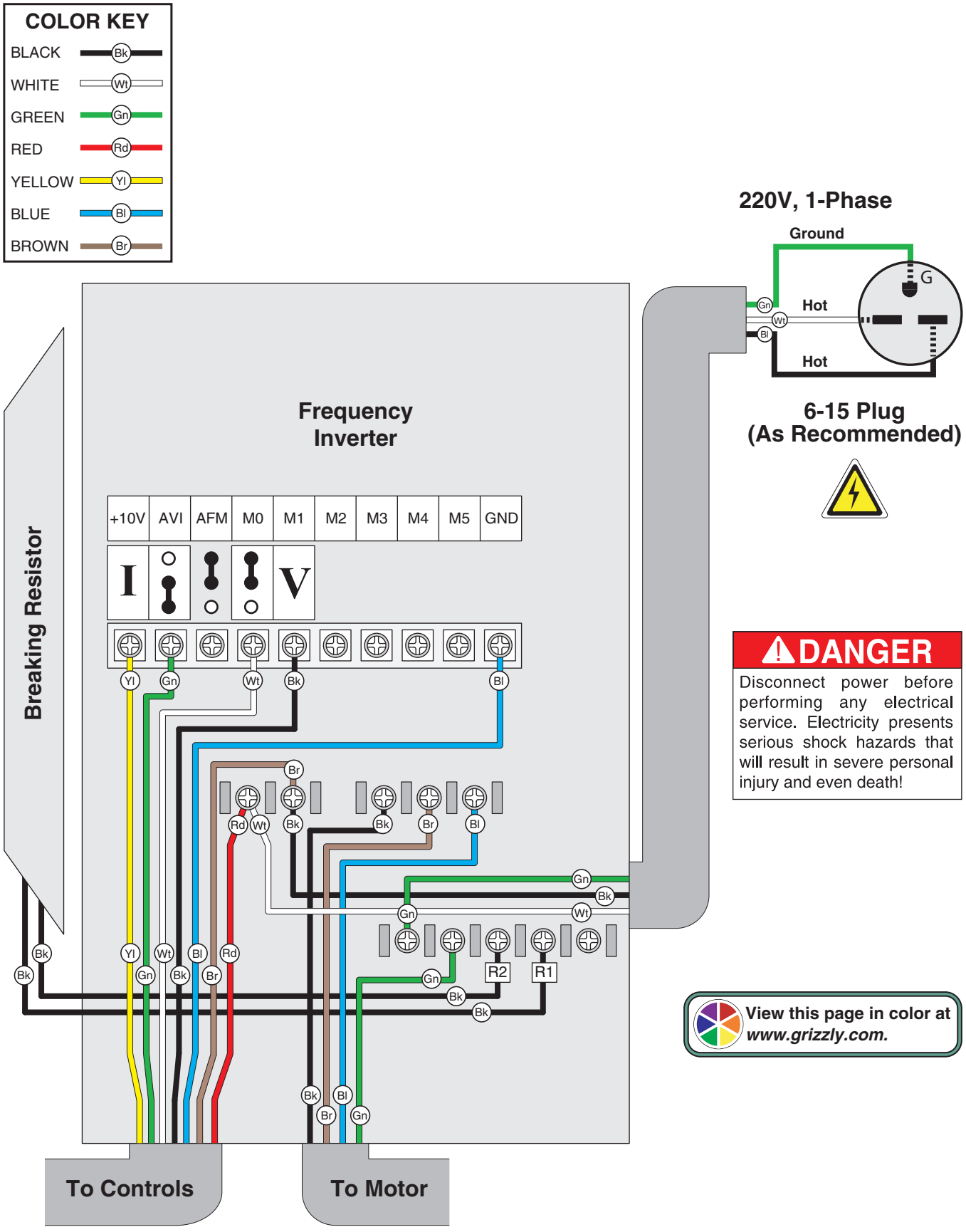
Frequency Inverter Wiring Diagram



DANGER

Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!

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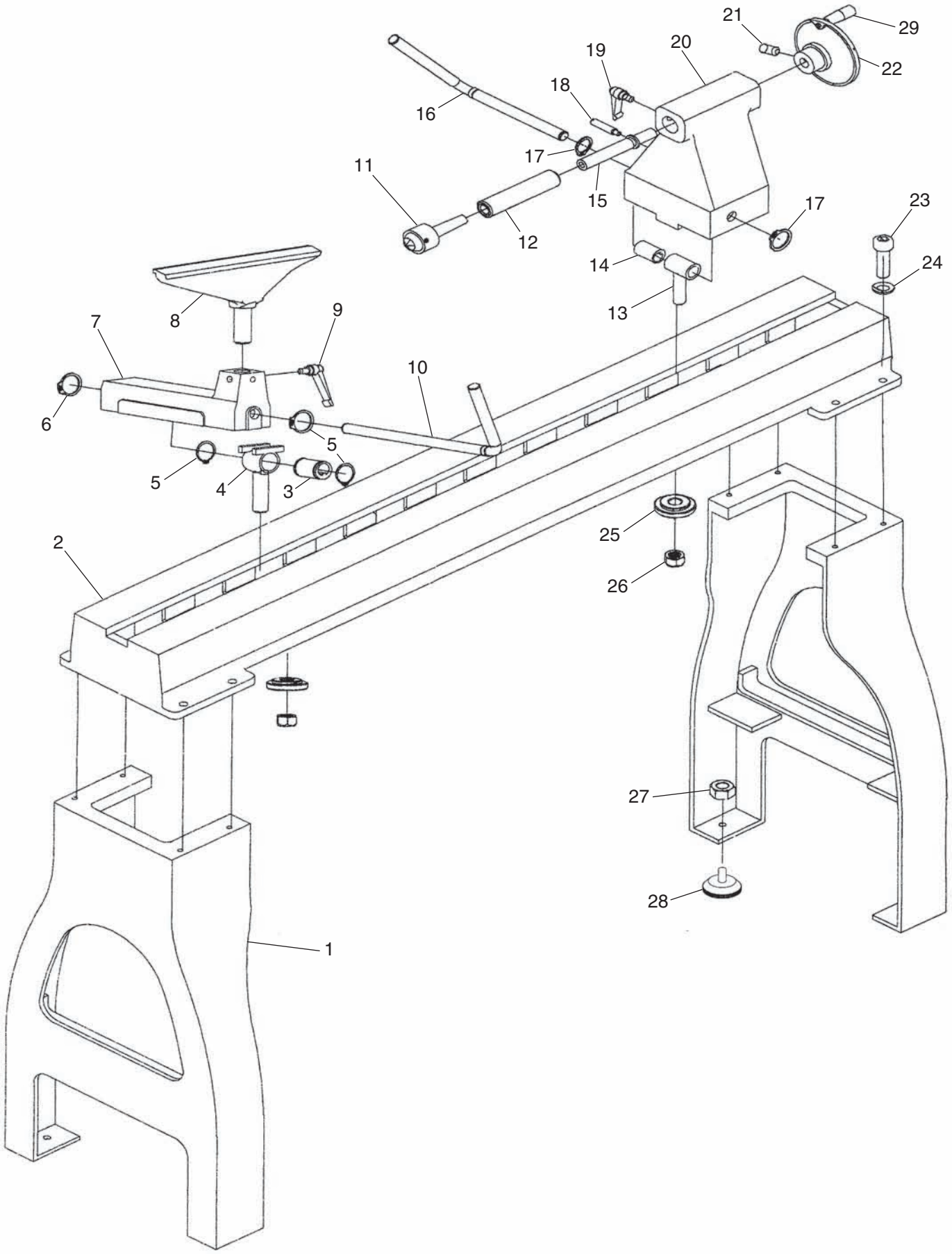
Stand & Bed Parts Breakdown

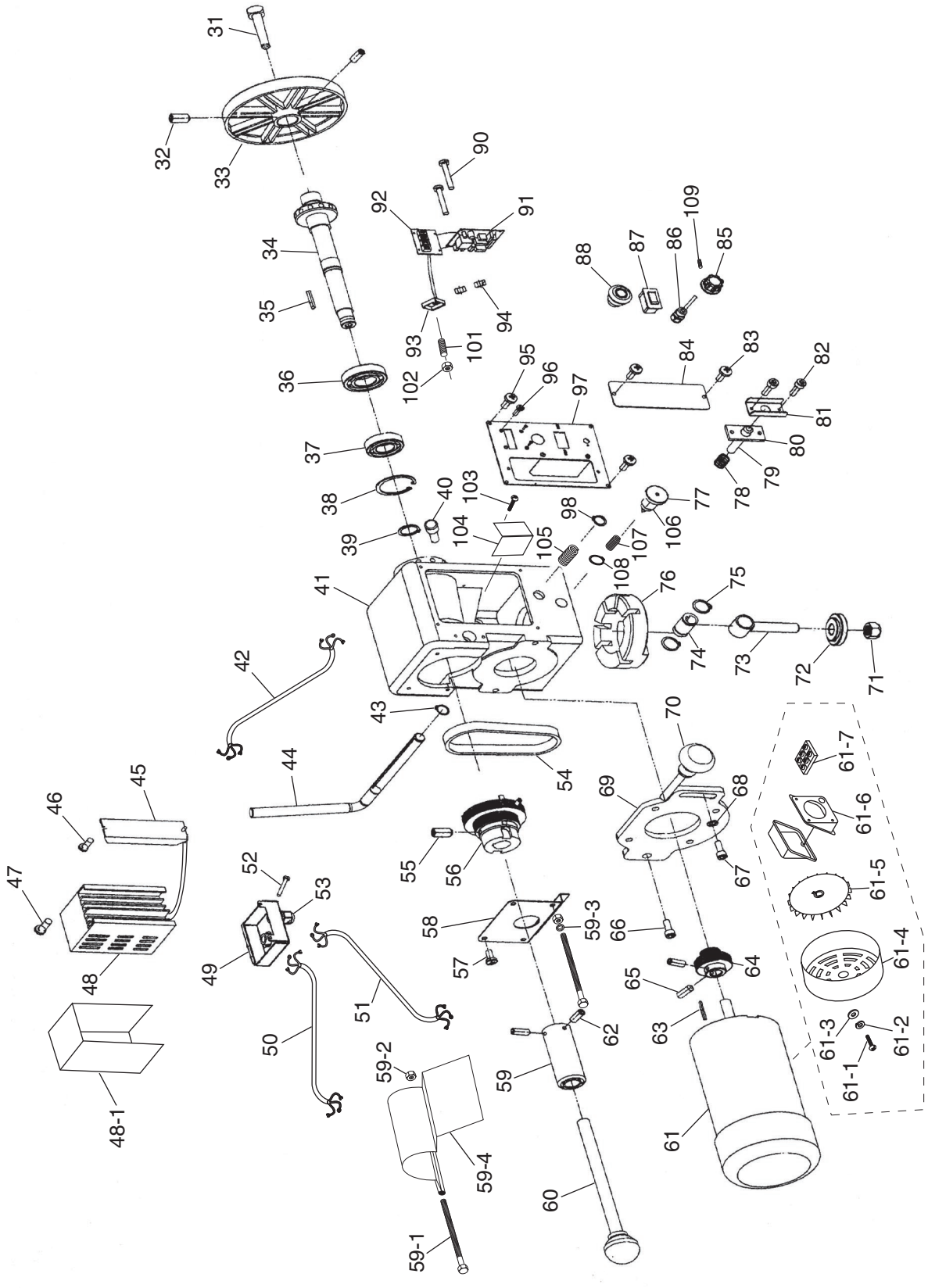


Stand & Bed Parts List

REF	PART #	DESCRIPTION
1	P0632001	SUPPORTING LEG
2	P0632002	BED
3	P0632003	BUSHING
4	P0632004	TOOL REST BASE LOCK BRACKET
5	PR07M	EXT RETAINING RING 18MM
6	PR07M	EXT RETAINING RING 18MM
7	P0632007	TOOL REST BASE
8	P0632008	TOOL REST
9	P0632009	TOOL REST LOCK LEVER
10	P0632010	TOOL REST BASE LOCK HANDLE
11	P0632011	LIVE CENTER
12	P0632012	QUILL
13	P0632013	TAILSTOCK LOCK BRACKET
14	P0632014	BUSHING
15	P0632015	LEAD SCREW

REF	PART #	DESCRIPTION
16	P0632016	TAILSTOCK LOCK HANDLE
17	PR07M	EXT RETAINING RING 18MM
18	P0632018	LOCK PIN
19	P0632019	QUILL LOCK LEVER
20	P0632020	TAILSTOCK
21	PSS04M	SET SCREW M6-1 X 12
22	P0632022	HANDWHEEL
23	PSB64M	CAP SCREW M10-1.5 X 25
24	PLW06M	LOCK WASHER 10MM
25	P0632025	CLAMP
26	PN29M	HEX NUT M18-2.5
27	PN02M	HEX NUT M10-1.5
28	P0632028	MACHINE FOOT
29	P0632029	HANDWHEEL HANDLE

Headstock Parts Breakdown

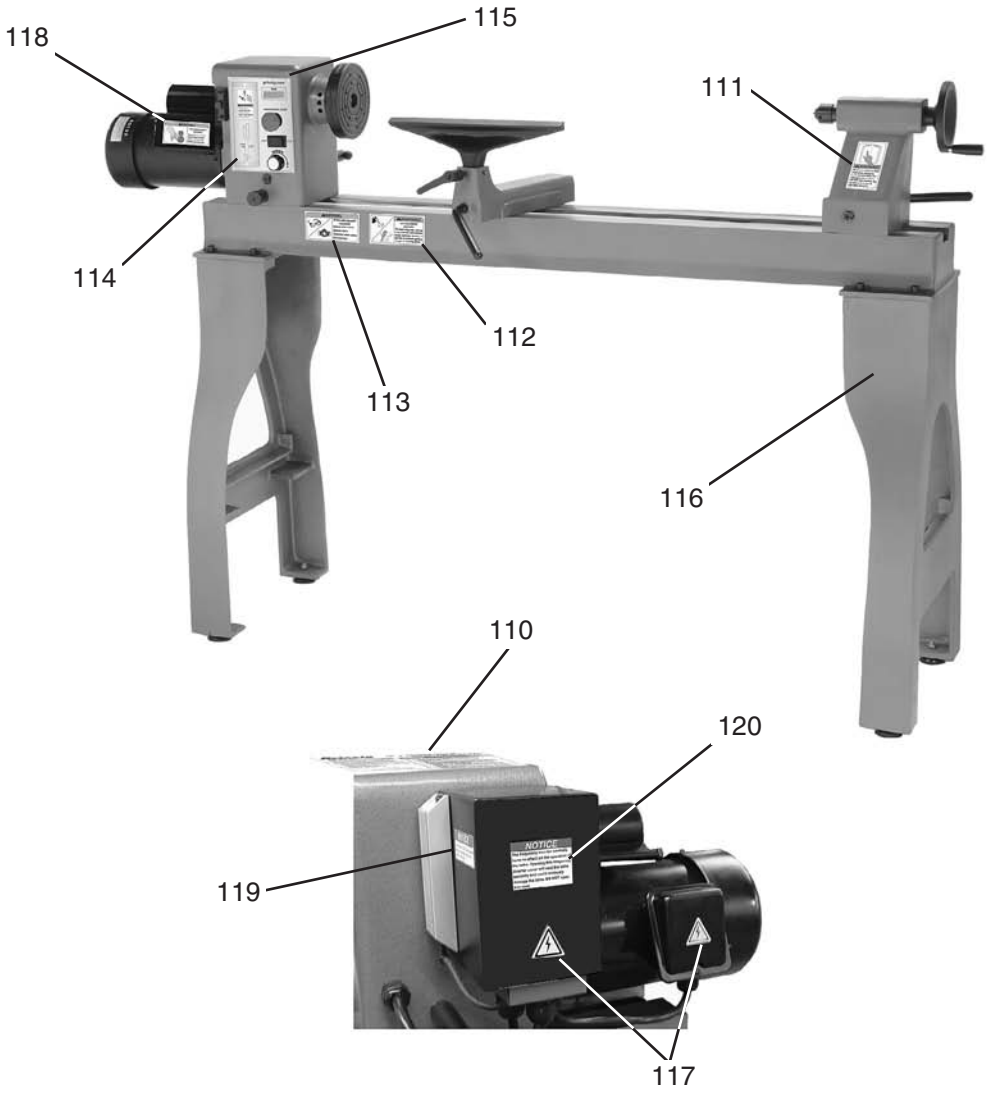


Headstock Parts List

REF	PART #	DESCRIPTION
31	P0632031	SPUR CENTER
32	PSS64M	SET SCREW M6-1 X 15
33	P0632033	FACE PLATE
34	P0632034	SPINDLE
35	PK12M	KEY 5 X 5 X 30
36	P6207-2RS	BALL BEARING 6207-2RS
37	P6206	BALL BEARING 6206ZZ
38	PR38M	INT RETAINING RING 62MM
39	PR15M	EXT RETAINING RING 30MM
40	P0632040	INDEX PIN
41	P0632041	HEADSTOCK
42	P0632042	HEADSTOCK WIRING HARNESS
43	PR07M	EXT RETAINING RING 18MM
44	P0632044	HEADSTOCK LOCK HANDLE
45	P0632045	BRAKING RESISTOR
46	PHTEK12M	TAP SCREW M5 X 15
47	PSB33M	CAP SCREW M5-.8 X 12
48	P0632048	FREQUENCY INVERTER
48-1	P0632048-1	FREQ INV SAFETY COVER
49	P0632049	WIRING BRACKET
50	P0632050	POWER CORD
51	P0632051	MOTOR WIRING HARNESS
52	PS55M	PHLP HD SCR M3-.5 X 10
53	P0632053	STRAIN RELIEF
54	P0632054	RIBBED BELT 180J6
55	PSS80M	SET SCREW M8-1.25 X 15
56	P0632056	SPINDLE PULLEY
57	PS08M	PHLP HD SCREW M5-0.8 X 12
58	P0632058	SIDE BELT ACCESS PANEL
59	P0632059	SPINDLE HANDLE
59-1	P0632059-1	HEX BOLT M8-1.25 X 140
59-2	PN03M	HEX NUT M8-1.25
59-3	P0632059-3	RUBBER WASHER 8MM
59-4	P0632059-4	SPINDLE HANDLE SAFETY COVER
60	P0632060	KNOCKOUT TOOL
61	P0632061	MOTOR 220V,3-PHASE
61-1	PS49M	PHLP HD SCR M3-.5 X 5
61-2	PLW09M	LOCK WASHER 3MM
61-3	PW07M	FLAT WASHER 3MM
61-4	P0632061-4	FAN COVER
61-5	P0632061-5	FAN
61-6	P0632061-6	MOTOR JUNCTION BOX
61-7	P0632061-7	JUNCTION BLOCK
62	PSS64M	SET SCREW M6-1 X 15

REF	PART #	DESCRIPTION
63	PK33M	KEY 5 X 5 X 45
64	P0632064	MOTOR PULLEY
65	PSS64M	SET SCREW M6-1 X 15
66	PSB64M	CAP SCREW M10-1.5 X 25
67	PSB64M	CAP SCREW M10-1.5 X 25
68	PW04M	FLAT WASHER 10MM
69	P0632069	MOTOR MOUNTING PLATE
70	P0632070	FEMALE KNOB M8-1.25
71	PN29M	HEX NUT M18-2.5
72	P0632072	CLAMP
73	P0632073	HEADSTOCK LOCK BRACKET
74	P0632074	BUSHING
75	PR17M	EXT RETAINING RING 26MM
76	P0632076	ROTATION BRACKET
77	P0632077	ROTATION LOCK PIN
78	P0632078	COMPRESSION SPRING
79	P0632079	SPINDLE LOCK PIN
80	P0632080	PLATE
81	P0632081	BRACKET
82	PSB10M	CAP SCREW M5-.8 X 15
83	PS08M	PHLP HD SCR M5-.8 X 12
84	P0632084	FRONT BELT ACCESS PANEL
85	P0632085	VARIABLE SPEED KNOB
86	P0632086	VARIABLE SPEED CONTROL
87	P0632087	FWD/REV SWITCH
88	P0632088	EMERGENCY STOP SWITCH
90	P0632090	FLAT HD SCR M3-.5 X 30
91	P0632091	RPM READOUT CIRCUIT BOARD
92	P0632092	RPM READOUT LED
93	P0632093	RPM SENSOR
94	PN07M	HEX NUT M3-.5
95	PS50M	PHLP HD SCR M3-.5 X 12
96	P0632096	FLAT HD SCR M3-.5 X 20
97	P0632097	CONTROL PLATE
98	PR07M	EXT RETAINING RING 18MM
101	P0632101	ALL THREAD M3-.5 X 25
102	PN07M	HEX NUT M3-.5
103	PS09M	PHLP HD SCR M5-.8 X 10
104	P0632104	DIVIDING PLATE
105	P0632105	COMPRESSION SPRING
106	P0632106	SPECIAL NUT
107	P0632107	COMPRESSION SPRING
108	PR39M	EXT RETAINING RING 8MM
109	PSS31M	SET SCREW M5-.8 X 8

Label Placement



REF	PART #	DESCRIPTION
110	P0632110	MACHINE ID LABEL
111	P0632111	READ MANUAL LABEL VERT
112	P0632112	ENTANGLEMENT LABEL HORZ
113	P0632113	EYE/LUNG LABEL HORZ
114	P0632114	BELT ACCESS LABEL
115	P0632115	CONTROL PANEL LABEL

REF	PART #	DESCRIPTION
116	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT
117	PLABEL-14	ELECTRICITY LABEL
118	P0632118	SPINDLE ENTANGLEMENT LABEL
119	P0632119	SMALL INVERTER NOTICE LABEL
120	P0632120	LARGE INVERTER NOTICE LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinetmaker & FDM
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____Yes _____No

8. Would you recommend Grizzly Industrial to a friend? _____Yes _____No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____Yes _____No

10. Comments: _____

_____

_____

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Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

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Name_____

Street_____

City_____State_____Zip_____

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